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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

SHALL I LOCATE? AND WHERE?

BY GEORGE B. H. SWAYZE, M. D.,

Of Philadelphia, Pa.

(*Concluded from page* 314.)

There are other items of vital consequence that should be understood by physicians, young and old, who think of locating in a large city. Fuel and provisions are indispensable necessities of life, at least in Philadelphia, and hence the mercifulness of railroad monopoly makes of these daily necessities of the people a source of inexorable extortion, and there is no redress. It matters not how abundant fruit, vegetables, meat and grain are in the country, or how cheap, the exorbitant freight rates force up their cost. To-day I have been told that potatoes sell for forty cents per bushel in a smart country town about 120 miles distant; to-day I had to pay $1.30 for a bushel of potatoes in market. A clothing merchant informs me that a certain railroad charges country merchants eighteen cents per hundred pounds for shipping goods to the country, but charges forty cents per hundred for transporting articles used for food to the city. Anthracite is the only available fuel in cities, and it therefore is also a subject of oppressive rate discrimination, for reasons apparent. Although nearer the coal fields, the higher freight charged compels the people of Philadelphia to pay nearly one dollar more per ton than the same fuel is sold for in some country towns nearly a hundred miles further from the mines. City houses are hard to keep warm in winter. The fallacious system of cellar furnaces scatters money to the winds faster than it diffuses comfort to the dwelling. A moderately cold winter devours from eight to fifty tons of coal per house, according to size and pretensions. By the ton, good coal is $7, but thousands of families must buy by the bucket, which runs the price up to near $14 per ton. This anomaly of city life keeps a very large proportion of city population positively shifting from hand to mouth the whole year through, especially if they do not know how to lay the foundation of thrift by rigid self-denial. And I am not now speaking of the impoverished class who live in courts and attics, but of people who somehow keep up the passport card of about as much display as the doctor himself can afford. A neighborhood baker recently told me of a family living handsomely in a handsome house on an up-town street, and owing him fifty dollars for bread. The money was not collectible; they only changed their baker. A milkman of my acquaintance recently told me of a similar case, in which he lost thirty dollars in milk he had furnished from day to day for their table. The folks always offered him the excuse that they had sickness, and had to pay everything to doctors: an investigation showed that they paid the doctors with similar excuses only. In large cities the floating masses solve annoying pecuniary conundrums by a change of location to other neighborhoods, wherein they are lost from sight of old pursuers. The contingencies of fashion, taste and expedients, whet the wits of a large class who adopt for their moral code—"The world owes us a living whether we pay for it or not." This is usually the class in cities who seem to welcome the new physician, to his earlier

joy, but his later sorrow. A "new physician" who had been trying city practice for something more than a year, was at last housed in nearly three months by illness. On meeting him one day afterwards, I asked what had been the matter. His answer was a volume compressed into an utterance of outraged feeling: "*Nothing but bad bills! It was nothing but general exhaustion from running after bad bills—and mental worry—they wore me out with faithless promises!*"

Physicians in the country are sometimes prone to think that city doctors do not have to work hard for their money, and the former conclude to remove to the city for an easier field. Unfortunately these often find the field so easy that it becomes necessary to move back again. The writer has lived in his present location eleven years. During that time at least a score of doctors have located in the same neighborhood, tried it a few months or years, then moved away. Several of these were from the country, men of good practice there, but almost clientless here. In the course of a year or two several wisely returned to their old neighborhoods, where they were known, and doubtless where they were welcomed by appreciating friends—for nowhere does a man feel so lonely and helpless as in the wilderness of a great city of strangers. Because ten physicians succeed in making a living, with their offices near each other on a certain street, it is a grave mistake to expect that the prospect promises as much to twenty more because they put out their shingles. A few months ago I counted the signs of more than thirty doctors in the space of seven squares on this street and the immediate cross-streets. One has been removed by disease, one removed himself by suicide, six have sought fatter pastures elsewhere.

Physicians themselves are not always to blame for these mistakes of judgment, especially if they come from the country. Too often they are easy game in the agile hands of adroit real estate agents, who so well know how to praise up the prospects of any neighborhood where they may have a house to let or to sell. To illustrate: Some years ago a well-to-do physician from a large interior town thought he would like to move to this city; found a desirable up-town neighborhood where considerable building was in progress, and consulted a local real estate agent that had houses to rent. The astute agent soon furnished most satisfactory assurances of the wisdom of the doctor's project, and clinched his faith by citing the case of another doctor who had lately located in the same neighborhood, and "succeeded so well that in a year's time he was able to buy a $7,000 house!" Of course, the willing doctor rented a house, moved to the city; in six months discovered he had made an unprofitable venture; tried another part of the city for six months more, then moved back to his old home—a year and two thousand dollars out, besides business missed.

But *does* the city doctor have the easier life? No. One hundred dollars in the country will reach as far as three hundred to six hundred in large cities, according to location. With fees nearly the same among the general rank and file of the profession, it is self-evident that the city doctor must do extra work, must sustain extra wear and tear of body and mind to come out even. The perplexing uncertainties of a city establishment harrass the lives of city physicians by day and by night. Hence, also, that so many city practitioners feel impelled to round out limited receipts by engaging every spare hour, needed for rest and recuperation, in the severe toils of authorship in some form. It is the pressure of current expenses rather than the pleasure of overwork, that keeps so many pens busy turning out reports, reviews, essays, and books; and hence the publication of so much that is speculative, artificial, unreliable, and unsatisfying to the mass of practitioners. To practitioners in general in cities, professional experience is not so rich and varied as in country locations. The hospitals, infirmaries and dispensaries in cities, run by a select few to foster reputation in a *specialty*, or to open paths of introduction to general practice, monopolize the great harvest of cases by which beginners are usually enabled to gain prompt foothold and win distinguished success. In cities not the poor only, but many in entirely comfortable circumstances, become inmates of hospitals for treatment in cases of accidents, or special diseases, or they receive "out-door" treatment at their homes through dispensary ministrations; while in country locations all the surgery, obstetrics, eye and ear cases, skin and venereal complaints, and the general scope of medical observation and treatment come fully under the study of the local practitioners, thus immensely expanding their opportunities for securing broad and rich experience and early recognition of professional skill.

A physician's prosperity must be gauged at last not by what he is compelled to spend from year to year, but by what he is enabled to save above the current out-go. Ostentation is not wealth. The necessity for display is an exacting task-master. As compared with large cities, the advantages of country locations afford the great

mass of physicians much better and safer fields for experience and practice, for professional and social appreciation, for mental and moral expansion, for lucrative reward and substantial prosperity. Among his unpretentious, honorable peers, the honors of his attainments and office make the worthy physician in the country a head above men—a light to look up to in the community: in the rabble of great cities the physician is too often a head below men—a glimmering luminary lost in the jostle and confusion of lights.

"I don't see how all these doctors *live!*" remarked a moneyed business man to another, within my hearing, on a down-town street. During a few minutes' conference on the side-walk between these lords of ample means, two physicians had jogged past in their peculiar calash-top vehicles, that here announce the professional calling.

"The half of them go with less than half a living," remarked the one addressed, as they moved down street together.

Such derisive fling is not made against the respectable physician in country places, where the public know that he has an ample exchequer, and besides the income of a good practice, owns a good farm or grist mill, or several town properties, acquired by his frugal management of modest yearly profits. In the country such is the general possibility; in the city, the rarest of exceptions.

It was the testimony of a successful, prominent Philadelphia physician, on withdrawing from practice some years ago, that in an experience of a quarter of a century, as his income from practice gradually crept up from six hundred a year to three thousand dollars, the expenses of his advancement and social exactions kept even pace with his earnings, and left him nothing to lay by for future dependence.

And it need not be imagined by physicians in the country that eminent college professors acquire fortunes by practice; many of the greatest and the best have died insolvent. In the accessible calm and relaxation, that physicians find in country locations without detriment to pocket and prospects, there is a luxury of comfort unknown to the profession amid the almost pauseless din and hurry of city life. *There* may he always find equivalent substitutes for money, when money there is none; but such is not the case in cities—*there* he may be greeted by refreshing landscape, expansion of scene, quiet for weariness, reflection and sociality; but not so in cities where all is contracted, walled-in, hustle and tussle, with no rest to eye or ear, or nervous system, or head or heart from year to year. Is it any wonder so many long to get away for even a little while to enjoy the restful peace of nature's quiet in God's country?

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PURPURA VARIOLOSA.

BY T. N. RAFFERTY, M. D.,
Of Robinson, Ill.

The fact that several eminent physicians have recently failed to differentiate between purpura hemorrhagica and that most fatal form of smallpox known as purpura variolosa, together with the fact that I have lately had some experience in that line myself, is my excuse for calling the attention of the medical profession to this disease. Most of those who have felt called upon to write our text-books on the practice of medicine seem to have failed to recognize purpura variolosa as one of the forms occasionally assumed by smallpox.

In the article on variola by Curschmann, in Ziemssen's Encyclopedia, a little more than two pages are devoted to a description of this type of the disease; but unfortunately the index to that volume fails to indicate its consideration, although it is contained in the general index to the Cyclopedia. Bartholow, in his Practice, gives a synopsis of that by Curschmann in his article Variola, but the term purpura variolosa is not found in the index. It is also mentioned, as I understand, in Quain's New Medical Dictionary, but I have not had the opportunity to consult that great work. Watson, Flint, Niemeyer, Bristow, Dunglison, and Reynolds, ignore it altogether. At least, a diligent search on my part has so decided.

It is perhaps hardly necessary to say that a failure to recognize purpura variolosa, and especially to distinguish it from other and non-contagious diseases will, in most instances, result disastrously to both physician and friends.

To illustrate this, I report the case of Susan Young, who died recently in a conservatory of music in Cincinnati. Miss Y. was seen by Drs. Miller and Walker and Prof. Comegys, and her disease supposed to be purpura hemorrhagica. After her death the body was sent to her friends here. The permit of the health officer of Cincinnati to send the body was based on Dr. Miller's certificate that she died of purpura hemorrhagica. After arriving here, the corpse was conveyed to the house of her mother, and there exposed to the view of family and friends. As a result, we have had in this community ten cases of smallpox, to which may be added at least three in Cincinnati.

As one of our cases here was precisely similar to that of Miss Young, and was a typical case of purpura variolosa, I desire to report it somewhat in detail. On May 15, I was called to see Mrs. Caroline Young, æt. 62 years, and found her suffering from severe headache and pain in the epigastrium, attended by extreme nausea and constant retching and occasional vomiting of bilious-looking matter. Her bowels were obstinately constipated, and her breath exceedingly offensive. No pain in the back was complained of at that time. There was no rise in temperature; pulse normal, or nearly so, as to frequency, but quite weak, and patient seemed very much prostrated. What seemed appropriate treatment was given, and patient was seen again late in the evening, when her condition was unchanged, except that the morphia given had relieved somewhat the pain in epigastrium. It was also noticed that her face was somewhat red, though there was no fever, also that the conjunctivæ had a blood-shot appearance, and there was puffiness of the eyelids.

The second day there was little change except that the redness had invaded trunk and extremities, and some small petechial spots were noticed on abdomen and chest; was still greatly prostrated and very restless, retching and vomiting constantly. On the morning of the third day, I found my patient's condition unchanged, except that innumerable hemorrhages under the skin had occurred, both on trunk and extremities, and varying in size from a silver half dollar up to several inches in diameter. In the epigastric region, where a large sinapism had been applied the day before, a hemorrhage had occurred of the exact size and shape of the plaster. The woman seemed in a state of impending collapse, but was entirely conscious. Has slight cough, and is expectorating large quantities of blood; has also passed considerable blood from the bowels. She continued growing worse, and died on the fifth day of her illness, after a severe hemorrhage from the bowels. In this case it was evident from the beginning that it was extremely serious, and that from some cause there was a rapid and complete dissolution of the blood going on; but a diagnosis of smallpox would not, and I think could not, have been made at all had it not been for the fact that two other members of the family took sick the next day after this patient, and on the third day began to exhibit characteristic variola eruption.

Since the occurrence of these cases, Profs. Whittaker and Conner, of Cincinnati, have reported that they, with the late Prof. James Graham, treated a case some years ago, which they reported as having died of anomalous typhoid fever, but which the autopsy showed to have been purpura variolosa.

I am also informed that Prof. McKenzie, of Cincinnati, recently treated a case in one of the hospitals in that city which he regarded as bloody measles, but the autopsy showed it to be variola.

In another instance, I am informed by Prof. Comegys, the coroner, at the instance of the health officer, recently disinterred the body of a girl reported as having died of purpura hemorrhagica, which the post mortem said was purpura variolosa. This patient had been attended by three able physicians, and this during the newspaper excitement over Miss Young's case. Yet in this instance there is excellent evidence to prove that the pathologist was in error, and the physicians right; for this patient's unvaccinated sister had slept with her during her sickness, and twenty or more of her young lady friends had kissed her at the funeral, and a "wake" had been held over the body for two nights, and no other cases were developed from the exposure.

So Prof. Eichberg had a fatal case of purpura, which only a *post mortem* enabled him to say was variola. As an early diagnosis of this disease is of so much importance, and, if possible, is so confessedly difficult, it is well that physicians should be ever on the alert, even if only for the sake of saving their own reputations; for the laity, believing that medicine is an exact science, will always be ready to attribute mistakes of this character to carelessness or worse. The definition and history of purpura variolosa are very lucidly given by Curschmann in the article before alluded to, and I venture to quote him somewhat in extenso, and as follows:

"Under this title we understand those cases in which the process designated 'hemorrhagic diathesis,' the nature of which is yet unknown, and which, as we shall see, may also appear during the exanthematic stage, imprints its frightful stamp upon the disease, even in its initial stage, or at the end of it, *even before* the first rudiment of small-pox pustule can be detected. It leads steadily and rapidly towards death. If this view is firmly held, that purpura variolosa is the initial stage of variola that has become hemorrhagic, the manifold objections disappear which have been made concerning its relation to hemorrhagic and non-hemorrhagic forms of the small-pox process. It disposes particularly of the doubt, recently revived, whether this form should not be withdrawn from the chain of small-pox processes and assigned to a separate position, inasmuch as the

anatomical conditions, especially of internal organs, indicate results different from those observed in the remaining forms. The anatomical variations present are explained most readily upon the ground that the hemorrhagic diathesis causes death in another stage, in which a different condition of the organ occurs. The uninterrupted transition of purpura variolosa into the hemorrhagic pustular forms is exhibited in those cases in which, in addition to the purpura, there are a few actual (hemorrhagic) papules or pustules."

The most characteristic of the symptoms as stated by Curschmann, are, in the initial stage, rigors, headache, intense pain in the back, and great prostration. Soon a diffuse scarlatiniform redness invades the body and extremities, leaving the face at first almost always exempt. In this erythema, petechia and larger cutaneous hemorrhages rapidly appear, and vary in size up to that of a silver half-dollar. The face becomes red and puffy, conjunctivæ blood-shot; there are black rings around the eyes from hemorrhage in the cellular tissue of lids and contiguous parts.

There is usually intense pain in epigastric region, accompanied by violent retching and vomiting; generally slight cough with bloody sputa. The fœtor oris is usually horrible. It is stated by Curschmann that a frequent opportunity of determining accurately the period of incubation in smallpox is not presented. In his practice the opportunity for this only occurred ten times in 1,034 cases. The points necessary in these observations are that there should have been but one exposure, and that it should have been of short duration. This being true, I wish to put on record the period of incubation in five cases where the above conditions for accuracy existed. In two of these the period of incubation was ten days, in two cases eleven days, and in one fourteen days. It was also noted that in those in whom the incubative period was shortest, the disease was most violent.

SOME CLINICAL OBSERVATIONS IN THE TREATMENT OF MALARIA.

BY JAMES M. BROWN, M. D.,
Of McVeytown, Pa.

Read before the Mifflin County Medical Society and published by request of the Society.

The writer of this article has been frequently impressed with the abrupt and usually complete termination to obstinate and oft-recurring attacks of intermittent and remittent fevers brought about by treatment instituted by the patient or his friends, which treatment, while it cannot be said to be the result of any scientific investigation is usually based on practical experience and entails generally the best practical results.

They vary somewhat in form, yet I believe the desired object is attained through a common principle, viz., a positive and abrupt impression on the system, amounting to almost, if not absolute shock.

This is sometimes reached through the direct intervention of the digestive organs; at others, indirectly through the nervous centres. The rehearsal of some cases from memory, selected with a view to variety of types of treatment, will more clearly elucidate the points to which I desire to call your attention.

Mrs. P——, aged about sixty years, had suffered repeatedly from chills, and at three different times she came under my professional care, and after considerable trouble by the ordinary routine of treatment would be dismissed as well, the attacks recurring again at intervals of from two weeks to two months. She made a strong infusion, or perhaps it might be more properly called tr. of bitter apple (the fruit of the cucumis colocynthis), and after taking several large doses became very sick, intense pain in the head, depressing nausea, with violent retching, and watery dejections lasting some six or eight hours. On being called to see her in this condition I treated her distressing symptoms *only*—ordered quietude and abstemious diet for a few days. She did not take a particle of the remedies ordinarily used in malaria, but she has not had a chill since, now fifteen months ago. The patient being feeble and old, and of sparse build, her condition certainly could not be said to be produced by plethora, or resulting congestions, and the treatment effective from any depletory or depurative processes.

A son of the former case, aged about thirty years, after repeated attacks, made use of "hard cider," drinking about seven pints in four hours, from which he was prostrated for a couple of days with nausea, headache, and delirium, free diaphoresis adding greatly to his already weakened condition; but a cure was effected which eighteen months exposure has not dispelled.

His wife and daughter, after repeated attacks and routine treatment, with relapses, made heroic use of strong infusions of coffee. In the case of the former, a complete cure was effected, while the daughter, a delicate girl of some twelve years, who could only be persuaded to use a small amount of coffee, suffered a relapse in about two months.

In these two cases there was a less amount of gastric disturbance than the former two, but the nervous symptoms were very marked—vertigo, tremor, and extreme wakefulness.

David Y——, aged about thirty years, suffered almost continuously for over two years, using quinine with adjuvants, breaking the paroxysms only to return on the least indiscretion or exposure. During an attack he sat in the sun and ate four lemons in rapid succession, immediately afterwards drinking very freely of whisky. Strange to say, his stomach tolerated and retained it. Not being accustomed to the use of stimulants, drunken stupor rapidly supervened, followed in turn by severe headache, throbbing temples, and nervous prostration, lasting for twenty-four hours or more. Eighteen months have elapsed and there has been no return of the chills.

Daniel S——, a boatman, had suffered almost continuously with chills for two years. At the termination of an attack, a physician in Baltimore, whom he had consulted, gave him an emetic to be used in conjunction with large draughts of warm water at the first indications of the return of a chill.

After working in the water the greater part of a day, he had all the premonitory symptoms of a chill, and at once did as directed. Copious emesis followed, prostrating him for some twelve hours; but the chill was broken, and has never returned, though twenty years have elapsed, during all of which time he has lived in the Juniata Valley.

And so I might go on and multiply cases, but enough has been cited for my purpose. I do not believe that these are chance cases, which would have otherwise terminated as favorably; but embracing as they do cases from the mildest to the most severe, some of which had been treated after the most approved and scientific manner, with only partial success; others, in which no special treatment at all had been instituted, I am led to inquire, what is the necessary therapeutic effect in the proper treatment of this troublesome malady?

The class of symptoms, the result of the treatment, is very similar in many respects to that of cinchonism; the chief difference being perhaps a greater amount of gastric disturbance

Probably the *most generally* accepted theory today as to the action of quinine in the treatment of malaria is that the malarial poison consists of, or is conveyed by, low organisms, infusoria, or fungi, which enter the body and increase and multiply in the blood, and that quinine, acting as a protoplasm poison, destroys or entirely restrains the development and multiplication of these low organisms. Whether the fungoid theory of malaria be true or not, one thing is certain, that the same saturation necessary to produce a fatal effect in these low organisms, in fluids *without* the body is necessary also in the *blood*, to be most effectual in the treatment of malarial poisoning. It might also be mentioned that the saturation of the blood to this extent very greatly interferes also with the development and migration of the white blood corpuscles.

Now be this anti-malarial action of quinine what it may, is it too much to say, that the same results are possibly attained by the heroic methods I have cited? In either case, a most positive and definite impression is effected.

The physician in the treatment of this malady by quinine aims to produce that disturbed condition of the system known as cinchonism, while this self-instituted treatment to which I refer produces as great, if not still more violent disturbance, with results so far as observed as good as that of cinchonism. Its further and more minute study may perhaps add to our knowledge of and ability to cope with such a disease.

A NEW INSTRUMENT FOR THE INTRODUCTION OF GELATINE SUPPOSITORIES INTO THE UTERINE CAVITY.

BY F. H. BOUCHER, M. D.,

Of Brooklyn, Iowa.

As the use of gelatine suppositories or pencils has become an established mode of treatment in uterine affections, that method by which their introduction into the cavity of the uterus can be accomplished with ease and rapidity to the gynæcologist, and comfort to the patient, will be heartily appreciated by the profession. The want of such a method presented itself quite forcibly during the treatment of the lady, the history of whose case is not essentially different from that usually accompanying cases of this kind. I will not enter, therefore, into any detailed account of it, but will direct attention chiefly to the instrument which the requirements of the case led me to devise for the application of that treatment upon which I had decided.

The patient, 38 years of age, married, consulted me by proxy through her husband. I prescribed for her several times in this way for what other physicians had variously termed irritation and inflammation of the bladder; but giving her no relief, I suspected the presence of some uterine affection, and so insisted upon an ex-

amination per vaginam, which revealed an anteflexion of the uterus accompanied by endometritis.

Among other remedial agents, I determined to make use of the uterine gelatine suppositories. I used in this case those made by the Western Suppository Company of Chicago. I found, however, that I could not introduce them as high up into the uterine cavity as I desired by the usual method, viz., the uterine dressing forceps. When the bulb or olive point (which is the distinguishing characteristic of the suppositories made by this company) reached the internal os, or rather that part of the cavity temporarily occluded by the flexion, the suppository would bend or double on itself.

This difficulty I overcame by the invention of an instrument which I have since improved, and which now, I think, fulfils all indications, not only in this and similar cases, but also where there is no change whatever in the normal axis of the uterus.

It meets the requirements admirably for the introduction of gelatine suppositories and pencils of any and every shape and manufacture into the cavity of the cervix uteri, and also through the internal os into the cavity of the body. I also use it for a sponge-tent expeller, and an applicator.

The instrument, a cut of which is given above, is somewhat similar to the ordinary sponge-tent expeller, differing from it in this respect: instead of terminating in a large, rigid, and unpliable steel point, it has a flexible, elastic point of copper about two inches in length and about the size of a number 2 or 3 Bowman's lachrymal probe, the remainder of the shaft being made of steel, having attached to it a hard-rubber handle. Over this slides a spiral-wire canula, fitted at each end with hard-rubber buttons.

The advantages of the copper point will be quite apparent to those who have ever had occasion to introduce these suppositories. It should be inserted almost, but not quite, through the suppositories, and thus serves to stiffen them, thereby preventing the tendency that they always have to double on themselves. The wire being made of copper, enables the operator to bend the suppositories after they have been placed upon it into any shaped curve corresponding to the curve of the uterine cavity, when they can be introduced as readily as the uterine sound—the small size of the wire not materially increasing the size of the suppository. The instrument can be obtained through the trade, and of the Western Suppository Company of Chicago.

Hospital Reports.

A CLINICAL LECTURE DELIVERED AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

BY WILLIAM GOODELL, M. D.,

Professor of Gynecology in the University of Pennsylvania.

Reported by WILLIAM H. MORRISON, M. D.

Anteflexion of the Uterus with Stenosis of the Cervical Canal and Dysmenorrhœa, Treated by Rapid Dilatation. Flatulent Distention of the Stomach.

GENTLEMEN—While our first patient is being etherized, I shall make a few remarks in regard to her condition. She is 25 years old. Puberty began at the age of fourteen, and she has had ever since obstinate and severe dysmenorrhœa. She married two years ago, and has since gone from bad to worse. She comes to us now not so much for the pain during menstruation, but for pain in coition. We have a technical term for painful coition; it is dyspareunia. In other words, she has dyspareunia.

Let us try to trace this matter up; but as I have not yet examined the woman, I may not be entirely correct in my conclusions. When an unmarried woman, or one who is married but has never borne children, complains of dysmenorrhœa, there will be found in the great majority of cases an anteflexion. This is the natural condition of the womb. Retroflexion and retroversion are not normal, but are usually produced by lack of involution after labor. The womb being too heavy topples over backward, and there is produced according to the plasticity of the womb, a retroflexion or a retroversion. If it is plastic and easily bent, there is a retroflexion, but if the uterine tissue is firm, and the ligaments somewhat relaxed, there is a retroversion. This girl, the history tells us, has had dysmenorrhœa since puberty; that she married at the age of 23, and has gone from bad to worse. As I have often told you, marriage without children is poison to the woman. The fact that she has painful menstruation shows that there are two conditions, or one of the two conditions present. There is either an exaggerated anteflexion or a stenosis of the cervical canal or both. If the bend in the womb is great, no fluid can escape. The blood collects in the cavity of the womb, gradually distending it and straightening the canal, when the menstrual fluid escapes with a gush. The stenosis may be due to the bent condition of the canal. I am in the habit of illustrating it in this way: if when you are watering flowers with a hose, a mischievous boy bends the pipe, a stenosis by angulation will be produced, and the water will stop flowing. In typical cases of dysmenorrhœa from this cause, the menstrual fluid that has collected escapes with a gush; but often when you question the patient you will find that this has not been recognized. They will, however, tell you that the pain is suddenly diminished; that it goes on increasing until it reaches an acme, when there is a lull. It is often difficult to decide whether a woman has stenosis by angulation. The sound

may readily pass through the cervical canal, but at the monthly periods the mucous membrane becomes congested and thickened, thus occluding the canal. In married women who do not bear children there is superadded to this monthly congestion, the engorgements from coition. Accumulation of the fluid within the uterus at the menstrual periods leads to hypertrophy of the organ, so that we have in such cases not only the monthly congestions but also the engorgements from coition acting upon this womb already hypertrophied and engorged. There is thus produced a sub-acute form of endometritis. The ovaries also become turgid and tender. When a woman tries to avoid having children by the use of preventive measures, I have seen produced the most exquisite sensitiveness of the cervix. Ordinarily, the cervix is not at all sensitive. A red hot iron can be applied, and the woman will notice only the smell of burnt flesh; caustic may be applied, or it may be stuck with a knife, and the woman not complain. Under certain circumstances, the cervix will become exceedingly tender; and I have found nothing produce it so frequently as the use of preventive measures, especially the one most commonly practiced, that of withdrawal. I have seen a number of such cases. In the first one, the cervix was so tender that I could not touch it, and the moment I attempted to introduce the sound, the woman shrieked. I could not understand it. In telling me her history, she told me that she was using preventive measures, and told me the plan. In this patient I subdued the sensitiveness by the use of vaginal suppositories containing

℞. Morphiæ sulph.,
Ex. Belladonnæ, āā gr. 1.

The next case was a physician's wife. I found the cervix exceedingly tender, but by the exercise of great care I was able to introduce the sound. I then told her directly that she was trying to avoid having children, and told her the plan adopted. She admitted that it was so. I told her that if she wanted to get rid of the trouble that she must avoid the practice. I have seen several other instances, in all of which the women were practicing measures to avoid conception. In withdrawal, the act is not completed on the part of the woman, and the womb is left in a state of terrible congestion. In the act of coition the parts are gorged with blood, but when the fruition of the act is accomplished there is great relaxation. Indeed, this is so great that there is an old Latin adage which says, "After coition, melancholy comes." But when the act is not completed, the womb is left in a state of turgidity for a long time.

This woman is anxious to have children, and it is evident that her condition does not result from any evil practice. She is also naturally desirous that coition should take place in a normal manner with full enjoyment on her part.

Anteflexion *per se* needs no treatment, but if it causes dysmenorrhœa, it calls for treatment unless the dysmenorrhœa be due to nervous causes or irritability of the womb. Irritability of the womb was first described and insisted upon by Dr. Hugh L. Hodge, formerly Professor of Obstetrics in this university. He was so in the habit of dwelling on it that it got to be a sort of a cant phrase among the students, and on the walls of the old university building on Ninth street could be seen many a pencil engraving of Hodge on an irritable uterus. There is a great deal of truth in his teachings in regard to irritable uterus.

I shall now examine the patient. I find that there is an anteflexion for I can readily get the womb between my two hands, by making pressure from above. I pass the sound by pressing it well back against the perineum. It gives a measurement of three inches.

In treating such a case, dilatation is the method, not the cutting, or, as it is called, the bloody operation. This latter consists in slitting up the posterior lip of the cervix to the vaginal junction and passing in a knife and cutting the little spur of tissue within the canal. This is not as successful as dilatation and far more dangerous. Many lives have been sacrificed by it. I have notes of 140 cases in which I employed dilatation, and I have performed the operation in a number of other cases of which I have no notes, and in only a few instances has there been any peritonitis, and in these, it has been rather a slight metritis, with a little implication of the peri-uterine peritoneum. I have never had any alarming symptoms.

I next pass the speculum and catching the cervix with a tenaculum, introduce Ellinger's dilator with the curve downwards. This readily enters the cavity. If it will not pass in the first time, pass it as far as it will go and then dilate. You can probably then pass it in to the womb. If not, push it a little further and again dilate. There should always be a shoulder on the instrument two inches from the tip, in order to prevent it from entering too far and hitting the fundus. There should be at least half an inch between the ends of the dilator and the fundus of the womb, for if they were in contact with the womb, they would, when opened, be very likely to tear the uterine tissue and lead to serious results. The body of the womb is very vulnerable, while the cervix is not, except to cutting injuries. The dilator passes in so readily that you would say that there is no stenosis, but the stenosis results from swelling of the mucous membrane at the menstrual period. In dilating, I open the blades gradually, as I do not wish to exert too much force at once. I have torn the cervix while dilating. One instance was in a married woman who had dysmenorrhœa. When a married woman who has borne children has painful menstruation, it is, as a rule, due to one of two things. The womb is either badly retroflexed, or else she has been treated with nitrate of silver. Twenty years ago, every woman, no matter what was the ailment of the womb, who received local treatment, had nitrate of silver applied to the cervix. Many of the older physicians are still using it, but it is an exceedingly bad practice. It is sometimes useful, but only in exceptional cases. It causes contraction and hardening of the tissue. In the lady alluded to, nitrate of silver had been applied to the cervix, until the parts had lost all elasticity. In dilating I tore the neck of the womb. The tear did not amount to much, but there was some hemorrhage. This I controlled by Monsel's solution, and the applica-

tion of a tampon. Once, in a virgin, I tore the cervix, but no bad results accrued. The only thing was that a physician who saw that tear, might insist that she had borne a child.

This is an operation which I can confidently recommend. I sometimes have to repeat the dilatation, but the woman is so much benefited by the first operation that she readily consents to its repetition. This method of dilating the cervix is not worth anything for the removal of growths within the cavity, for the stretching is not sufficiently great, and the parts come together too quickly.

Having opened the blades to their fullest extent, I have the ether removed and allow the instrument to remain until she begins to squirm. Before beginning the operation I introduce an opium suppository into the rectum. By the time that the effects of the ether have disappeared the opium will have been absorbed. She will be put to bed, and in two hours a second suppository may be required. Two are usually sufficient.

Flatulent Distention of the Abdomen.

Our next patient is thirty-eight years old. She has had one child, who is seven years old. She was married to her second husband three years ago. She thought that she had become pregnant. She had all the signs except the non-occurrence of the monthlies. She then had a fright which was followed by hemorrhage, lasting for two or three days, accompanied by bearing-down pain. Since then she has had metrorrhagia, has lost flesh, has suffered from pain low down in the back, especially when sitting, and the abdomen has continued large. She complains of something rolling in the stomach, and thinks that it is a baby.

Talking of babies being in the stomach, reminds me of a woman who came to the hospital off and on for four years, and I could never persuade her that she was not pregnant.

A physician is sometimes deceived in this way. He may have attended a lady in a number of confinements. The lady may be about forty-five, when suddenly the menses stop; she begins to enlarge, and she has certain symptoms which make her believe that she is pregnant. The physician is informed, and thinking that she ought to know, he takes it for granted. The woman feels very happy, tells all her friends, and soon the whole town knows that Mrs. Smith, after being sterile so long, is going to have a baby. The baby clothes are gotten out, and the stores are searched for pretty things for the little stranger. Time goes on; the physician, perhaps, cannot take his summer vacation. By and by, the nine months have passed and no baby comes. Thinking that a mistake in the calculation has been made, the doctor waits a few weeks longer. He then makes up his mind that there is something wrong, calls in another physician, and an examination reveals that it is nothing but fat with flatus behind it.

These cases often remind me of a little story in "Charles O'Malley," a book which I frequently read when a boy. Miss Judith Macan writes to her brother, stating that she is coming to London to consult one of the city physicians, because she thinks that the country doctor does not understand her complaint, as he says that "it is nothing but religion and wind." In these cases it is fat and wind.

Exposing the abdomen, we find the evidences of former pregnancies in the lineæ albicantiæ. These are evidences of some distension of the abdomen. They may be the result of dropsy, but if a woman is in good health, it is not likely that she ever had a dropsy sufficient to cause distension great enough to produce these lines. Grasping a fold of the abdominal wall in my hand, I find that there is not much fat. There is a tympanitic percussion note all over the abdomen. She says that it is smaller at times, and that fright and excitement cause it to increase in size. This distension is due to air in the intestines. This may result from family troubles, or because she has not a happy home. Defective circulation of the nerve-fluid may cause this distention or secretion of wind, if I may use the term, for I must say that I am not satisfied with the theory that this distension is owing to paralysis of the intestinal wall. I have seen enormous quantities of air passed and belched up—more than one would think possible that the body could contain. I have had patients in whom pressure on certain points of the spine would immediately cause the abdomen to enlarge, and the patient would belch forth incredible quantities of air. While her attention was distracted by listening to me, the abdomen became more flaccid. I am able to swear that there is no baby there.

She may have some pelvic trouble. I shall now examine *per vaginam*. I find that the womb is bound down by bands of lymph. This may have resulted from a pelvic hæmatocele. Around the ovaries is a large plexus of blood-vessels, the pampiniform plexus. One of these vessels may rupture, or an old adhesion may be torn, and a collection of blood form in Douglass' pouch. When such a thing happens, there is a history of pain and collapse. When in any case of abdominal pain with collapse you exclude intestinal trouble, you put your finger in the vagina and find Douglass' cul de sac filled, you have to deal with one of two things: either a tubal pregnancy which has burst, or a hæmatocele. Of course, a ruptured tubal pregnancy is in one sense a hæmatocele, but the term is used to indicate hemorrhages from other causes. The blood collects and acts as a foreign body, producing cellulitis. The history of primary cellulitis is different. In this, the first symptom is usually pain, but in puerperal cases, the first sign is often a chill. After a length of time has elapsed, it is impossible to say whether the disease began as a hæmatocele or as a primary inflammation. This pelvic trouble is one cause of distention of the abdomen. Feeling assured that she is not pregnant, I shall pass the sound. The womb measures two and a half inches, and is fixed.

The cellulitis is the condition requiring treatment. Injections of large quantities of water would be of advantage. They may be medicated by the addition of one ounce of ammonium chloride to the quart of water. I shall place a small blister over the abdomen. This will be repeated every two or three days. The frequent repetition of small blisters does more good than applying one and keeping it sore for some time.

What medicines shall we give by the mouth? Sometimes there are night-sweats. We then give quinia and aromatic sulphuric acid. As there are

no night-sweats in this case, I shall order ten grains of ammonium chloride with one-twenty-fourth grain of the bichloride of mercury (to be increased to one-twelfth grain) three times a day. The chloride of ammonium is not a pleasant medicine to take, and in order to disguise its taste I often give it in mistura glycyrrhizæ composita, which contains paregoric, spirits of nitrous ether, liquorice, and tartar emetic. I think that the small doses of antimony add to the alterative effects of the mercury.

As she has no facilities for taking the hot-water injections, I shall not order them in her case, for a small quantity of water would do more harm than good. When blisters cannot be used, the next best thing is painting the abdomen with iodine. If the bowels are costive, they will be regulated by the use of the compound liquorice powder of the German pharmacopœia, which, in addition to senna, contains sulphur.

This woman may never have children, for the ovaries may be covered with lymph, through which the ova cannot force their way, or the fimbriated extremities of the Fallopian tubes may be so attached to adjacent parts that they cannot grasp the ovum when discharged.

NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. SEELYE, A. M., M. D.

Cardiac Disease.

GENTLEMEN: You remember the case which I showed you last week, of the man who had cardiac disease and a certain amount of general dropsy, (see page 320). For the rest of that day he was tolerably comfortable, but that night he had an attack of extreme dyspnœa, and the action of the heart became very irregular and rapid. His anasarca steadily increased, and on Wednesday night he had a convulsion which affected mainly the left side of the body. He failed steadily, and died at 3.15 Thursday afternoon in great distress, gasping ineffectually for breath, and dying as these patients generally do, in a state of coma. He was unconscious during the preceding twenty-four hours.

You can readily understand the mechanism by which these results were caused. The dyspnœa was due to the increased congestion of the lungs, and the interference with the systemic circulation was made evident by dropsical accumulations in the connective tissues beneath the skin, and in the meninges of the brain, and this latter caused cerebral pressure, and hence coma and death. The *post mortem* examination revealed the presence of mitral stenosis and aortic regurgitation or insufficiency. The free edges of the valves were thickened and slightly contracted. The mitral lesion had been made out during life, but the insufficiency of the aortic valves had not, though its existence was suspected. There was no distinct murmur heard over the sternum and extending downwards towards the xyphoid cartilage and to the left, or upwards to the right. Nor was there the characteristic pulse of aortic regurgitation, but it was extremely feeble.

The heart was found to be extremely dilated, and was two or three times its normal size. There was in addition, as might be expected, considerable congestion of the lungs, and parenchymatous nephritis, and an enlarged and fatty liver. The brain was normal in appearance, and showed no cause for the convulsions.

MEDICAL SOCIETIES.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Infant Foods.

BY PROF. ALBERT R. LEEDS, PH. D.,

Of the Stevens Institute of Technology, Hoboken, N. J.

[Read, by invitation, May 2, 1883.]

(*Continued from page* 322.)

I have spoken thus severely of Savory and Moore's food, because, whilst claiming to be prepared in accordance with Liebig's principles, it actually contravenes them. The following much less ambitious preparations are worthy of more favorable comment:

Baby Sup No. 1 is advertised as an excellent substitute for mother's milk, in case of infants under four months of age. It is a very sweet partly crushed whole oat-meal, very palatable even before cooking, and dissolving readily in the juices of the mouth. It is prepared from malted oats, and, after the conversion of the starch has gone as far as it is thought it will proceed, the oats are carefully hulled, only a residue of the coat being left in the crack of the grain. The analysis shows the lowered percentage of starch, and the increase of saccharine bodies due to this treatment.

Baby Sup No. 2 consists of wheat flour, malted barley and bicarbonate of potash, in the proportions given in Liebig's formula. In its dry state the mixture has little taste, but becomes thin, sweet, and palatable on cooking. The analysis gives but a partial result of this change, because the food was cooked only five minutes before the analysis, whilst the directions call for a half hour's cooking. But already much of the starch has been converted into dextrine. These foods are commendable efforts to carry Liebig's views into practice, and it is to be regretted that a certain amount of care and time is required to properly cook them and, for this reason, they will probably have only a restricted use. In Mellin's, Horlick's, and Hawley's foods this care and time have already been expended by the manufacturer, and experience has shown that few mothers or nurses can or will take so much trouble.

Keasbey and Mattison's Food.—From the point of view above taken, it is possible to explain a peculiarity in its composition, which I failed at first to understand. This is, that the sample of this food which I examined contained no albuminoids whatsoever. Its advertisement states that it is an extract prepared from malted grain, dextrine, alkaline phosphates, etc., and that it is perfectly free from starch. It does not resemble the other preparations of Liebig's foods in the market, being, unlike them, a thick liquid, resembling, both in taste and appearance, some variety of mo-

lasses or syrup. My first explanation of the entire absence of albuminoids was, that no grain was used in its preparation. This is not the case. The food is not strictly a Liebig's food, but in reality a neutralized extract of malted barley. The ground malt is extracted with hot water, the liquid strained, evaporated *in vacuo*, and neutralized with bicarbonate of potash. There is no question that the albuminoids did not pass the sieve, for I could neither determine them by ordinary methods, nor get the reaction for nitrogen by the most severe tests. But, as before stated, there must be present certain extractives, and the analysis should be directed to finding them, and thus seek to explain the undoubted benefits frequently conferred by the use of this food.

Before concluding with regard to Liebig's foods, I desire to say a few words concerning the percentages of dextrine and cane-sugar reported for these foods. The former would be nearly that which would correspond to the difference between the amount of soluble carbohydrates and the sum total of grape-sugar and cane-sugar. But it is not put down in the analysis, because it was not directly determined, and I did not know how much soluble matter of other kinds, possibly soluble albuminoids and other extractive matter of great dietetic value, might possibly be thus erroneously set down as dextrine. The percentages of cane-sugar are not strictly correct, because the presence of dexterine somewhat raises the results obtained, and there is no method, so far as I am aware, of making a satisfactory determination of cane-sugar and grape-sugar and dextrine in a mixture of the three bodies. But the method applied was the same in every instance, so that, besides the cane-sugar proper which is derived from the cereal used, the added percentage due to the error arising from the presence of dexterine would be nearly the same in every sample analyzed. The investigation of this problem should also come into the complete analyses of these foods, as well as the other matters spoken of hitherto. Scheibler, indeed, has indicated a method of detecting dextrine when mingled with cane-sugar in an amount not exceeding 3 per cent., but in these cases we have, as in Mellin's food, no less than 37 per cent. of dextrine, and 44.69 per cent. of grape-sugar as well, the cane-sugar itself being comparatively insignificant. His method is of no value for such cases.

Class III. Milk Foods.

	15. *Nestlé.*	16. *Anglo-Swiss.*	17. *Gerber's.*	18. *Amer. Swiss.*
Water	4.72	6.54	6.78	5.68
Fat	1.91	2.72	2.21	6.81
Grape-sugar and milk-sugar	6.02	23.29	6.06	5.78
Cane-sugar	32.93	21.40	30.50	36.43
Starch	40.10	34.55	38.48	30.85
Soluble carbohydrates	44.88	46.43	44.76	45.35
Albuminoids	8.23	10.26	9.56	10.54
Ash	1.59	1.20	1.21	1.21

These articles have been prepared in order to supply a food which should contain the constituents of milk to a certain extent, and yet should be free from the objections to which condensed milk is open. The attempt was first made by H. Nestlé, in Vevey, Switzerland, but at the present time many milk factories are in existence, including one in our own country, at Little Falls, New York, under the management of Dr. N. Gerber. All of these milk-foods consist of cereals specially prepared in combination with milk. The preparation of the Anglo-Swiss milk-food is stated to be as follows: Twenty parts of Russian wheat flour and twenty parts of oat-meal are made into a dough and baked. The biscuit is then ground fine, mixed with sixty per cent. of condensed milk, dried by a slow heat at 120° to 130°, ground, and sufficient wheat gluten added to bring up the percentage of albuminoids to the same amount as that present in human milk. It is evident that apart from giving a general idea of the method of manufacture, this statement cannot be regarded as correct, inasmuch as the percentage of fat in the Anglo-Swiss milk-food analyzed is much less than that which would be imparted by sixty per cent. of condensed milk. The percentage of albuminoids likewise makes it doubtful whether any albuminoids in addition to those present in the milk and flour, have been added in the form of specially prepared wheat gluten.

According to Dr. N. Gerber (*Milk analysis*, page 70), the various milk-foods in the market vary in composition as follows:

		Average.
Water	5.0 to 10 per cent.	7.50
Salts	1.5 " 3 "	2.25
Fat	4.0 " 7 "	5.50
Albumen	9.5 " 18 "	13.25
Soluble carbohydrates	35.0 " 55 "	45.00
Insoluble	15.0 " 35 "	25.00
Cellulose	0.5 " 1 "	0.75

It will be noted that Nestlé's food departs further from the average than any of the other preparations, and the American Swiss approaches most nearly. The percentage of fat in the latter is much larger than in the other preparations, and the percentage of albumoids is likewise the greatest. On preparing these various brands, the Nestlé, Anglo-Swiss, and Gerber's were very palatable and delicate in their flavor, more so than the American Swiss, which had a slight rancidity connected, no doubt, with the large percentage of fat and fatty acids. Under the microscope the various milk-foods had a similar appearance, exhibiting agglomerations of starch granules and globules of milk. They all gave the starch and dextrine reaction with iodine, the reaction for dextrine being stronger in the Gerber than in the Anglo-Swiss. All had a faintly acid reaction except Nestlé's, which was slightly alkaline.

All of them have the same points in their favor, a high percentage of albuminoids, fats, and salts, this being especially true of the American Swiss. The conversion of the starchy matters into dextrine by previous baking gives to this class of infant foods the advantages of that class of prepared cereal, which have been rendered easily assimilated by a process of previous torrefaction. The addition thereto of condensed milk has both advantages and disadvantages. The advantages are that the condensed milk is milk in a pure and safe form. Instead of being coagulated in large, cheesy masses in the child's stomach as would be liable to be the case if the condensed milk, after thinning with water, were given alone to the infant, the admixture of dextrine and torrefied milk keeps the caseine divided, and causes it to form in small flakes more nearly analogous to

those forming from woman's milk. The condensed milk likewise adds a noteworthy percentage of fat, which is conspicuously absent from the other infant foods. It also adds a certain amount of milk-sugar and increases the percentage of albuminoids and valuable saline matters, more especially the phosphates. The principal disadvantage is, that condensed milk is preserved with the aid of cane-sugar, its analysis being as follows:

Water	20.0	to	30.0	per cent.
Salt	1.5	"	3.0	"
Fat	8.8	"	12.0	"
Albuminoids	10.0	"	13.0	"
Milk-sugar	10.0	"	15.0	"
Cane-sugar	30.0	"	45.0	"

Cane-sugar, therefore, being relatively by far the largest constituent, there soon arrives a point in the manufacture of milk food when the addition of condensed milk must cease. Otherwise the percentage of cane-sugar, which like other carbohydrates is very objectionable when it takes the place of a proper amount of albuminoids, would become excessive, and indigestion thereby be induced in the infant using such food. The remedy, it appears to me, would be found by using a condensed milk preserved without the aid of cane-sugar, and since this can now be successfully affected by means of Appert's method, the preparation of a milk food not open to the above objection should be soon satisfactorily accomplished. In that case we should have an infant's food with a very high percentage of albuminoids, fats, and salts, and a low percentage of carbohydrates. The sugar would be present in the form of milk-sugar derived from the milk, and as grape-sugar derived by a process of torrefaction from the meal. The last in its turn would not have to be present in larger amounts than what are requisite to supply the starch and dextrine, which are of use to prevent coagulation of the caseine in large masses.

CONDENSED AND PRESERVED MILK.

	Ondenaed (mean of 41).	*Ondensed (diluted).*	*Preserved Alpine.*	*Preserved Amer. Swiss.*	*Preserved Amer. Swiss (diluted).*
Water	30.34	88.39	58.57	59.21	87.78
Water	12.10	2.02	13.21	11.55	3.46
Milk-sugar	16.62	2.77	15.29	13.04	3.91
Cane-sugar	22.26	37.1			
Albuminoids	16.07	2.68	11.36	14.10	4.23
Ash	2.61	0.43	1.78	2.09	0.62

It will be seen that when the condensed milk is diluted until its percentage of water is about the same as in human milk, it has relatively too little fat, and too little sugar (the larger portion of that also being cane-sugar) as compared with human milk. It has also too much albuminoids and ash.

Preserved milk is the result of scientific investigation applied to this subject, and its manufacture marks a great advance in the technique of the milk industry. The product, when diluted, has no cane-sugar (an abnormal constituent of milk), and the ratio of its constituents is similar to ordinary cow's milk. It differs, of course, from human milk, and requires the addition of milk-sugar, fat, and of some bland inert attenuant, like torrefied wheat or barley flour, to overcome the general objection to any form of cow's milk as a substitute for woman's. Experiments in this direction are on foot, and will probably result in supplying a milk-food not open to some of the objections urged against previous preparations of this class. The keeping qualities of the preserved milk are likewise very remarkable; its introduction is a great public boon, and cannot fail to exert a powerful influence upon the future of urban milk-supply, and the alimentation of infants.

Conclusions.—I have been frequently asked why I do not publish my own opinion as to the best of the various infant foods now in use. To do so would be very unwise for many reasons. But I have endeavored to do what I have regarded as of far more importance than this, which is to praise or blame just as the information afforded by physical and microscopic examinations and chemical analyses demanded, without partiality or bias, and to seek out and state the principles upon which, as it appeared to me, the dietetic value of these articles of infant food depended.

To summarize the points which I have endeavored to establish:

1. Cow's is in no sense a substitute for woman's milk.

2. Attenuation with water alone is inadequate, and chemical metamorphosis, or, mechanically, the addition of some inert attenuant is required, in order to permit of the ready digestibility of cow's milk by infants.

3. The utility of manufactured infant's food is to act as such attenuants, and as such they take the place of the simple barley and oatmeal water, the sugar, cream, baked cracker, arrowroot, etc., etc., used in former times.

4. The results of both chemical and physiological analysis are opposed to any but a sparing use of the preparations containing large percentages of starch.

5. It is eminently probable that besides acting as attenuants, the matters extracted in the preparation of barley and oatmeal water, and still more the soluble albuminoid extractives obtained at ordinary temperatures (whereby coagulation is prevented), by Liebig's process, have a great independent value of their own. For this reason, instead of employing starch, gum, gelatine, sugar, etc., the use of natural cereal extractive, containing saccharine and gummy matters and soluble albuminoids as well, such as our great and inspired teacher Liebig himself advocated, is in accordance with the developments of science since his time.

6. The use of a food made up of equal parts of milk, cream, lime-water, and weak arrowroot-water, as practiced for years by the late Dr. J. Forsyth Meigs, and recently advocated by his son, Dr. Arthur V. Meigs, is sustained by theory, analysis, and practice. It provides for the increase of fat to an amount comparable to that contained in human milk. It adds alkali to permanent reaction, and to convert caseine into soluble albuminates, it adds a little bland attenuant. And if, in addition, the amount of milk-sugar were raised, and instead of arrowroot water, barley or oatmeal water were substituted, as the case demanded, it would approach, it appears to me, still more nearly to the conditions required.

7. The perfect solution of the present problem is to be found in the modification of cow's milk by

chemical processes, so as to make it physiologically equivalent to human milk. The nature of these processes, and the results to be obtained, are at present so nearly wrought out, that there is good ground for believing that such a solution of this problem is not far distant in the future.

EDITORIAL DEPARTMENT.

PERISCOPE.

The Pathology of Bronchial Asthma.

We take the following from the *Med. Times and Gaz.*, March 31, 1883:

The pathology of bronchial asthma is such a favorite subject of investigation and discussion, especially with our German *confrères*, and the results arrived at by different authorities from time to time are frequently so discordant, that instead of reproducing at once their arguments in these pages, we are compelled to adopt an attitude of interested expectation, and to wait for the confirmation or disproval of the last new view on this as on many other subjects. The most recent contribution, however, to the pathology of asthma appears to us to be so important, and so likely to prove in the main correct, as to deserve to be submitted to the profession in this country, and to be carefully tested by clinical experience. This contribution comes from the pen of Professor Riegel, of Giessen (the author of the article on Asthma in "Ziemssen's Cyclopædia"), and appears in the *Zeitsch. für Klin. Med.*, Bd. V., page 413.

In approaching the consideration of the pathology of asthma, Professor Riegel was met by several distinct questions which are still more or less imperfectly settled. The first of these questions manifestly is; Is there really such a function in the bronchial muscles as active contraction, sufficient to affect the calibre of the tubes and to modify the pressure of the air within the lungs? Very different have been the answers given to this question by different physiologists—for we must be careful to notice that this is but a matter of physiology, and not of clinical medicine. Professor Riegel's results are entirely in accordance with the accumulating evidence of the work of recent, as well as of some of the older and most distinguished observers—namely, that irritation of the bronchial muscles does raise the pressure within the lungs, and that this irritation may be induced through the medium of the vagus. This point having been settled, the next question was whether stimulation of the vagus caused acute dilatation of the lungs, such as is seen in asthmatical seizures; and this question, also, Professor Riegel was able to settle in the affirmative, the pulmonary area enlarging rapidly when the vagus was galvanized in the neck (in dogs), remaining large during the continuance of the stimulus, and slowly returning to its normal dimensions when the irritation was removed. Nothing could have been more easy, or indeed more natural, than to conclude after these two series of experiments that the pathology of bronchial asthma was practically settled; that this disorder is essentially a neurosis of the vagus, the dyspnœa due to bronchial spasm and the pulmonary dilatation being the direct results of irritation of the great nerve of respiration. Professor Riegel was too cautious, however, to rush to this conclusion, and his next set of observations showed the wisdom of his hesitation; for they distinctly proved that whilst irritation of the vagus unquestionably produces the phenomena of asthma, *it does not do so by causing spasm of the bronchi.* No doubt, as has just been shown, spasm of the bronchi is a result of irritation of the vagus; but there is a much more important, because much greater or more extensive, cause at work than this.

The turning-point in the investigation was the discovery that irritation of the vagus causes the phenomena of asthma, not by acting peripherally, that is, through the branches to the bronchi—but by influencing the central extremity of the nerve, that is, the medulla, and so (reflexly) the muscles of respiration. When the *central* end of the divided vagus of the left side was faradized, and the other vagus cut, the same asthmatic phenomena were produced; the reflex, therefore, did not occur through the bronchial nerves, but by the respiratory nerves to the diaphragm and intercostals. That this was the case was completely proved by section of the phrenics before irritation of the vagus, for the phenomena of asthma were then entirely absent. An altogether unexpected result was thus reached, namely, that asthmatical phenomena may be produced *reflexly* through the vagus, and that the principal portion of the effect is a sudden inspiratory depression of the diaphragm, followed by its continued tonic contraction. It would thus appear that the theory of asthma, which represents the disorder as essentially one of bronchial spasm, must be given up. There can be no doubt that irritation of the vagus does cause bronchial spasm and moderate dilatation of the lungs, but this effect has always been regarded as much too insignificant to account for the symptoms of the disorder as clinically observed; and now that it appears to have been satisfactorily proved that besides this peripheral effect there is a reflex effect of incomparably greater importance, there is no reason why the theory of bronchial spasm should be any longer maintained.

Two very obvious objections to the view first stated are anticipated by Professor Riegel. Can it be possible, in the first place, that the diaphragm may remain so long in a state of contraction as to cause the protracted dyspnœa familiar in many cases of asthma? There is no evidence to the contrary; and in the course of these exper-

iments on dogs the diaphragm was actually seen to remain in a condition of contraction for ten minutes without producing asphyxia. Besides, the same objection might apply to the muscles of the bronchi. Again, it is a clinical fact that whilst the inferior lung-border is low in an attack of asthma, it moves in respiration. Is this fact compatible with spasm of the diaphragm? As a matter of fact it is: whether the phrenic be directly or indirectly stimulated, and the diaphragm thrown into inspiratory spasm, the lung-border moves slightly in respiration.

Lastly, Professor Riegel cautions us against coming to the hasty conclusion that we have now settled the pathology of bronchial asthma. Spasm of the diaphragm may explain some of the phenomena of the seizure, but it certainly will not explain all. For himself, he still holds that there may be vaso-motor disturbance and hyperæmia of the bronchi, along with spasm. Still, spasm there is, and the present investigation shows that it is chiefly a spasm of the diaphragm.

Operations on Phthisical Patients: with Remarks on Operations Performed During the Pyrexia of Phthisis.

After reporting four cases in the *Brit. Med. Jour.*, June 9, 1883, Dr. Howard Marsh writes:

I have related these cases in order to allude to an important matter, in respect to which practice is, I think, sometimes at fault. It is held by no means as universally as it formerly was, but still by many surgeons, that it is inadmissible to operate on a patient who has advancing phthisis; and the standing instance used to illustrate this rule is anal fistula. The objection to interference rests on two well-known grounds: first, that the wound will not heal; and secondly, that, as the fistula acts, by the discharge attending it, as a kind of counter-irritation, or, as some have called it, a safety-valve, it is dangerous to cure it. The safety-valve formula, though certainly a little vague, is a very deterrent one. We all know what the probable effect of closing a safety-valve will be. And this doctrine, having been accepted in respect to fistula, has been extended to such cases, for example, as diseases of the joints, in respect to which it is still held in some quarters, first, that an operation is very likely to be attended with local failure; and, secondly, that the removal of the diseased joint will have the effect of accelerating the mischief in the lung. As to operations for fistula in phthisical persons, the first objection is no doubt generally, or at least frequently, valid. If fistulæ are laid open in acutely phthisical patients, they will often either never heal or they will heal very slowly. But, on the other hand, there are not a few instances in which, even though a patient is phthisical, he may be cured of his fistula by operation; and probably every patient who can be thus cured will be the better for it. That is to say, the safety-valve doctrine is erroneous. I believe clinical experience shows this to be the case; and physicians may be inferred to hold this view, for counter-irritation, setons, and similar means, are very seldom used in the treatment of phthisis. The reason for curing a fistula, whenever this can be done, seems obvious enough. A fistula is not only a source of much annoyance, or even of pain, but also, from time to time, if not constantly, of high temperature; and it is agreed on all sides that a feverish condition, however it arises, has a decided effect in the promotion, or even, under certain circumstances, in the development of phthisis. There is so much in this, that, even though an operation will not lead to the complete closure of a fistula, it may be sometimes highly advisable to perform it for the sake of laying open passages in which discharge accumulates and becomes decomposed, or from which, failing a ready escape, it tends to burrow in new directions. Fistulous tracts, thus freely laid open, may be attended with much less pain and local trouble, as well as well as with less fever, than before. Thus, although there must be considerable reservation in respect to operations for fistula in phthisical persons, the rule against their performance must not be made by any means absolute. On this subject, Mr. Allingham has a valuable chapter in his work on the "Surgery of the Rectum" (p. 56 *et seq.*).

When, however, the arguments that apply to the case of fistula are extended to such an operation as amputation, we take a course that may lead us to an erroneous conclusion, and we are in danger of withholding treatment which is capable of rendering patients a great service. In the first place, the objection that the wound will not heal—frequently valid in fistula—is without foundation in all but a very few of the cases in which it would be reasonable to amputate, for instance, for disease of the tarsus or knee-joint. Were a patient in the last stage of phthisis, no one would be likely to advise amputation. But I believe the cases I have given may be taken as typical illustrations of the fact that, even when phthisis is advanced and active, an amputation-wound will heal as quickly as one, for example, that results from a secondary amputation for compound fracture. Secondly, the effect of removing a local disease, which is not only causing the patient constant suffering, but which raises the temperature to 102° or 104°, as in the case related above, is to produce a speedy and very marked decline of fever, and with this a rapid improvement in health. Perspiration ceases, appetite returns, the patient gains health and strength, and the chest-mischief becomes quiet. I have met with no evidence that removal of a local disease produces an increase of lung-mischief.

The difference in the repair of the wound in the two cases of fistula and amputation, is a question that involves some still debated points in the pathology of tuberculous disease. The contention of many observers at the present day would be that a fistula *in ano* in a tuberculous person is itself lined with genuine tubercle; while even those who speak of scrofula as differing from, although allied to, tubercle, would hold that a fistula is, in fact, a scrofulous sinus, such as might result from the formation of a scrofulous abscess in the groin or in the neck. But whatever view is taken of the pathological condition present in fistula in those who have phthisis, there is this great difference between the operation for fistula and that for the removal of a diseased joint: the one deals with parts already the seat of chronic and unhealthy ulceration, while the other involves

structures in which no process of disease has shown itself.

A further reason for reverting to the question of operating for the relief or removal of local disease in phthisical persons is that an amputation may now be fairly spoken of as a much less considerable proceeding than it formerly was.

In conclusion, I will only repeat that a too implicit acceptance of the doctrine that operations should not be performed on phthisical persons, may lead us to withhold interference which is frequently not only free from danger, but likely to be attended with the happiest results.

Staining Bacilli.

From the *British Medical Journal*, August 18, 1883, we note that M. Vignal has also made a comparative study of fourteen different methods of staining bacilli, and has come to the following conclusions concerning them, which have been communicated to the Biological Society of Paris (*Bulletins de la Société de Biologie*, May 19 and 26, 1883). Koch's method, the first that revealed the presence of bacilli, does not always succeed, and requires most minute care. Ehrlich's method is excellent; the formula he gives for the staining solution is not clear, but this is remedied by using the one recommended by Weigert, which may be called the Ehrlich-Weigert solution, and is as follows: Saturated solution of aniline water, 100 cubic centimètres, and 11 cubic centimètres of saturated solution of fuchsine or gentian-violet, or any other aniline color. Rindfleisch has observed that a temperature 40°C. (104°F.) facilitates the staining of bacilli, and that the specimens of tissue ought to be examined in a mixture composed of equal parts of gum and glycerine, to which is added a little arsenious acid to prevent the development of fungi. This solution is more easily used than Canada balsam; it renders the preparation as transparent, and the cloudy appearance resulting from the use of the balsam is absent.

Baumgarten's method reveals the presence of bacilli, but they are with difficulty distinguished from the vacuoles of the preparation. It brings under observation every other kind of micro-organism present in the preparation. Aufrecht's method stains the numerous micro-organisms present in the sputa of phthisical patients, and a few of the tubercle-bacilli. The solution recommended by Franz Ziehl stains the bacilli present in sputa as successfully as the Ehrlich-Weigert solution, but not so quickly.

As Ziehl has not made known to the scientific world what are the proportions of the substance used, M. Vignal has endeavored to determine the exact formula, which is as follows: Water 100, phenic acid (crystal) 1, saturated alcoholic solution of violet of gentian, or methylene, 5 to 10. Discoloration is effected by nitric acid.

Von Ermenzen's method stains the bacilli only faintly, and is not satisfactory, either for sputa or for sections. Gibbe's method is excellent for staining sputa-bacilli, but totally useless for sections of tubercle. Brun's method for staining bacilli is useless for sections, and not very successful in treating sputa, but his discoloring solution is excellent. Balmer and Fräntzel's method stains tubercle-bacilli very deeply. Their discoloring mixture is much stronger than any other; it takes effect in thirty or sixty seconds. The only defect in this method is the necessity of preparing the solution at the very moment it is wanted. Babe's method is an inferior modification of the Ehrlich and Wiegert's method. Zenkevitch asserts that his method is very rapid, also certain, but Gibbe's method stains with equal rapidity, and is more certain, although less delicate. Cheyne's method operates very successfully, but the red bacilli are not very evident on the blue ground.

M. Vignal's conclusions may be summed up as follows:

He recommends Gibbe's method for studying tubercle-bacilli in sputa and pus, because it operates rapidly and is especially adapted to all clinical study, and Ehrlich and Weigert's method for coloring sections.

Balmer and Fräntzel's mixture should always be used for discoloring, excepting sections which exhibit an abundance of connective tissue, when Brun's method is preferable. For preserving specimens, Farrant's solution is preferable to Canada balsam.

Memorandum on the Clinical Characters of "Wool-sorters' Disease" (Anthrax).

The *Med. Times and Gaz.*, July 21, 1883, says:

The subjoined memorandum has been prepared for use in an inquiry now being conducted by Mr. Spear on behalf of the Local Government Board, into the occurrence of anthrax amongst men employed in hide warehouses, tanneries, etc. Mr. Spear wishes it to be known that gentlemen who have had opportunities of observing the disease will be conferring a useful service by communicating with the inspector.

The "Internal Form" of the Infection, or Anthrax Fever.—Premonitory symptoms (of variable duration): Chilliness, aching or stiffness of limbs, and mental depression; restlessness, sense of constriction of chest, and oppression of breathing; headache, dizziness, nausea, or, less frequently, vomiting. Stage of full development: Notwithstanding the indefinite premonitory symptoms, the stage of full development is generally somewhat sudden and unexpected in its onset, so as to cause much alarm. The prostration and restlessness become extreme; there are præcordial anxiety and dyspnœa; blueness of the face and extremities (cyanosis) is conspicuous; and the patient may die within twenty-four or thirty-six hours with all the appearances of collapse or of asphyxia. A fatal termination is, however, more often postponed until from two to five days after the commencement of this stage. Other nervous phenomena—muscular paralyses, convulsions, or tetanic spasms—are then apt to develop themselves; and evidences of various acute local congestions (especially of the lungs, less frequently of the gastro-intestinal tract) are rarely wanting. Delirium is often absent; and the temperature is irregular. Exacerbations, alternating with more or less complete remissions, of the more urgent symptoms constitute usually a striking feature of the disease. Recovery is not so rare as has been supposed, even in fully developed attacks; but death may occur from a relapse, or from secon-

dary septic processes. The body after death usually undergoes rapid decomposition, with blue discoloration and swelling, especially about the neck.

[Before the disease was identified amongst the wool-sorters, deaths were usually referred to one of the more prominent local symptoms of anthrax, and were registered as from "pneumonia," "enteritis," "peritonitis," "meningitis."]

The "External Form" of the Infection, or Malignant Pustule.—The malignant pustule attacks almost always parts of the body habitually uncovered, and most frequently the face. It commences as a small papule, which quickly develops into a vesicle, and this, being broken, pours out a little watery exudation. The base of the vesicle, and the surface immediately adjacent, dies; so that in about three days after its appearance the lesion consists of a small central black eschar, with a raised border of inflamed and tumid skin upon which vesicles are apt to be developed; a crop of secondary vesicles surrounding thus the central eschar like a wreath. The neighboring lymphatics and glands are speedily implicated; and the patient may soon lapse into the condition described above, of constitutional infection. The pustule does not apparently always present this typical appearance; when occurring upon the hands such appearance is uncommon. It has then no central black eschar, no raised vesiculated border. It is described as "a small, slightly inflamed tumor, exuding only serosity; giving rise to comparatively little pain or even increased sensibility, but showing a tendency to set up a diffuse cellulitis." Constitutional infection may follow.

Digital Dilatation of Contracted Pylorus.

We have already referred to this operation, and as a valuable sequel we reproduce the following letter from Dr. Guido Pedrazzoli, of Bologna, to the *Lancet*, August 4, 1883:

Having read with pleasure in the *Lancet* of June 16, of the two patients operated upon by Prof. Loreta by forcible finger dilatation of the pylorus, I thought it might be agreeable to you to learn that they are continuing to do well. The vomiting they had been troubled with for years has not recurred; and from having been in a starving condition they have returned to full health and strength.

A third case was afterwards operated on, Prof. Loreta's diagnosis having been "simple stenosis of pylorus." The patient died in thirty-six hours, from causes entirely independent of the operation. The autopsy showed the incision in the stomach perfectly closed, gas and liquid tight, and pylorus well dilated.

The week before last, Prof. Loreta operated on a woman, the diagnosis being "stenosis of cardiac orifice," with entire success, and the patient continues improving. As the operator could not reach to dilate with his fingers, he was obliged to resort to an instrument. The fifth and last operation took place on July 15. The diagnosis, "stenosis of pylorus," was also in this case justified by the state of things found on operating. The success was perfect, as in the other cases. This last patient too, continues improving, and everything justifies the expectation of a favorable result. The digital dilatation of the two orifices of the stomach, but especially of the pylorus, first conceived and executed by our illustrious surgeon, and named accordingly "Loreta's operation," is destined to enjoy a brilliant future in the surgical world. Since its adoption, attention has been directed to the existence, little before suspected, of the frequency of pyloric narrowing; and the surprising results obtained fully justify the most sanguine expectations.

Prof. Loreta lays special stress on dilating with the fingers rather than with instruments, as he is thus enabled to carry the dilatation to the utmost possible extent short of rupturing the parts; for the fingers can feel how far we can safely go, which no instrument can of course do. The dilatation by the fingers once effected, we may reasonably count on its permanence, judging from the before-mentioned instances, the first of which was operated on in September, 1882. The suture for the wound in the stomach adopted by Professor Loreta is that of Apolito Gély, made with a single needle. This suture is quickly made and perfectly secure.

The Varieties of Angina Pectoris.

The *Medical Times and Gazette*, July 21, 1883, says:

Under the name angina pectoris many writers have grouped together symptoms differing from one another as widely in their causation as they do in gravity. It is of great importance to have clear views as to the different forms of angina pectoris. According to M. Henri Huchard (*Revue de Médecine*, Nos. 4 and 6), there is but one form of true angina pectoris, viz., that dependent upon cardiac ischæmia. This may be organic or functional. The former is produced by narrowing or obliteration of the coronary arteries; and the author quotes thirty fatal cases of this disease in which one or other of these conditions was found on autopsy. This form of the disease is of grave prognosis, and, indeed, generally proves fatal, in this respect forming a striking contrast to all the other varieties. The existence of functional ischæmia of the heart is not, of course, susceptible of such definite proof as in the case of the organic variety; but there is ample evidence, both clinical and physiological, that tobacco is capable of inducing this state of the heart. The symptoms which it may give rise to are so well known that it is unnecessary for us to do more than enumerate them. They are—diminished frequency of the pulse, palpitations, irregularity of the heart's action, fainting, and a feeling of præcordial distress which may go on to a typical attack of angina pectoris. Spurious angina pectoris is also of two kinds, the one including all cases of nervous or arthritic origin, the other cases of gastric origin associated with dilatation of the heart. The points which distinguish these spurious cases from the true forms are—that the attacks do not supervene with certainty on any one given cause, such, for instance, as any form of violent exercise; that the attacks, when they do occur, are not so severe and do not last so long as in the true disease; and that in this last or gastric form the attacks are especially prone to come on after a meal. The spurious cases never prove fatal.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Each year we welcome with pleasure the Transactions of the medical societies of the various States, for each new issue brings to us fresh evidence of the progress that our profession is making in this country, and of the increased interest taken by its members in these societies; we have received the Transactions of the Michigan State Medical Society for 1883, which is a very creditable and interesting record of a very live society. Prominently among the several interesting papers it contains, we would especially note that on "Water, its Relations to Health and Disease," by Dr. Julius A. Post.

——"Club-foot, Simple Measures for its Early Relief," by De Forest Willard, M. D. This reprint from the Transactions of the Medical Society of the State of Pennsylvania has already appeared in our pages.

——"The Country Doctor of Fifty Years Ago," is the title of an exceedingly interesting address, delivered before the last meeting of the New Hampshire Medical Society, by its President, Dr. A. H. Crosby. This paper will prove very readable to all, and particularly to our suburban and rural doctors, who will be gratified to learn how much better off they are to-day than were their predecessors of half a century.

——In a reprint from the *Medical Times*, June 30, 1883, of an article on "Adherent and Contracted Prepuce, commonly called Congenital Phimosis," read before the Philadelphia County Medical Society, Dr. De Forest Willard, of Philadelphia, gives some excellent advice concerning the relation of cause and effect between phimosis and certain nervous phenomena, as well as intelligent directions for the relief of this condition.

——The need of an efficient Ambulance Service has long been felt in Philadelphia. Dr. De Forest Willard voiced this want and suggested the remedy in an address read at the Academy of Music, April 30, 1883. The pamphlet is well worth careful reading.

——"The Management of Enteric Fever, According to a plan based upon the so-called Specific Treatment," by James C. Wilson, M. D. A paper read before the College of Physicians of Philadelphia. It has already appeared in full in our columns.

——"Beyond the Sunrise," observations by two travelers. This volume of light and interesting reading constitutes No. 109 of Lovell's Library; price, 20 cents.

——"Judicial Oaths and Their Effect." Such is the title of a little tract issued by the Friends' Book Store, 304 Arch street. It contains much that is sensible and thus concludes: "That Society should set up a distinction, which is not in the Christian code, between lying with an added oath and a lie without it, and that judicial tribunals should support it, we believe weakens the public conscience, both by undervaluing the naked truth and disregarding an express command of Christ. We hold, then, that all judicial oaths should be expunged from the statute books, and that legislative authority should be given to the principle, that every departure from the honest, simple truth, is an offense against both God and man."

BOOK NOTICES.

The Essentials of Bandaging, with Directions for Managing Fractures and Dislocations, etc., etc, By Berkeley Hill, M. B., F. R. C. S. Pp. 341. New York: J. H. Vail & Co.

This little work has reached a fifth edition, after careful revision and additions.

This is a very full manual of bandaging and surgical manipulations, and withal very compact and concise in its descriptions. There is, however one sentence under the directions for the administration of chloroform that cannot be passed without comment: "That if the patient is fit to undergo an operation at all he may inhale chloroform." When an authority such as Dr. H. C. Wood says distinctly, that so safe is ether and so unsafe is chloroform, that he who uses the latter with fatal effect can plead no extenuating argument, we must, at all events, look upon this chapter of the book as worthy of criticism.

A Pocket-Book of Physical Diagnosis of the Diseases of the Heart and Lungs. By Dr. Edw. T. Bruen, Dem. Clin. Med., Univ. of Penn., etc., etc. Pp. 227. Philadelphia: P. Blakiston, Son & Co., 1883. Price $1.50.

It is with pleasure that we note the second edition of this valuable little book, which has been revised and enhanced by the addition of numerous illustrations taken from actual cases in the writer's practice.

The diagram illustrating the tone and pitch of percussion resonance, makes this subject particularly clear to the student, as does also the chapter on the morphology of pulmonary phthisis, a point which, as a rule, is very chaotic in the mind of the young medical man.

Râles, both pulmonary and friction, are dealt with in a clear, concise manner that does not embarrass the reader with unnecessary words and classifications; upon the whole, this is a valuable work to have in the library of the student or busy practitioner.

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SCIENCE AND PSYCHOLOGY.

Most of us have often been amazed at the exhibitions of "mind-reading," "second-sight," and similar so-called psychical phenomena, which from time to time are presented to our notice in places of public amusement; and we usually satisfy our minds by attributing them to some clever trick on the part of the performers, which we are unable to fathom.

Early in 1882 the "Society for Psychical Research" was founded in England, with the avowed purpose of investigating, from a scientific standpoint, these phenomena.

The men forming this Society are of such a character as to command respect and, as the *Medical Press and Circular*, August 15, 1883, says, "to justify the belief that a *bonâ fide scientific* endeavor will be made by it to sift the whole mass of statements and experiences which has grown up around the questions."

They have made preliminary reports. The subjects of the experiments narrated in these reports were, in one case, the daughters of a clergyman, a member of the Society, and in the other two gentlemen who voluntarily offered themselves to the observation of the committee; and it may be once for all accepted that no suspicion of collusion, in the objectionable acceptation of the term, is to be entertained in respect to any of the trials.

The experiments conducted with the children referred to, were mainly based on the power they respectively possessed to divine the thoughts of others who were concentrating their perceptions on a particular object. One set of results with a pack of playing-cards is thus given: "With a full pack of playing-cards 248 trials were made with one or more of the committee. Of these, twenty-two were guessed completely right on the first trial, and eighteen on the second trial, or a total of forty quite right out of 248; or one right in not quite seven experiments." In addition, there were sixty-nine cases in which the card was guessed in part correctly. Omitting the second correct guess, these results show one quite right in eleven experiments; if pure guess-work were the explanation, there would have been one right

in fifty-two experiments. In the above-mentioned series of trials, the sister of the guesser was, as well as the committee, cognizant of the cards selected; but in a second set, during which the committee *alone* knew what had been chosen, sixty-four trials were made with figures ranging between ten and ninety-nine. The result showed one correct guess out of thirteen attempts, whereas pure guess-work simply would give one right in ninety experiments. At a subsequent date, the trials taking place this time in Dublin, Professor Barrett and the subject of the experiment, one of the children, aged fifteen years, were seated alone in a room with their backs to each other; the words "hearts," "clubs," "spades," and "diamonds" were written down by Mr. Barrett, and one of these words mentally selected by him; especial care was taken to prevent any kind of movement which might assist the guesser to divine which of the four terms had been hit upon. Out of fifty trials the word selected was rightly named twenty-five times at the first attempt, and a second attempt gave the correct answer in another ten instances. It is noteworthy, too, that during the latter half of the time occupied by the experiment the guessing was slower than at first, and less successful, eighteen out of thirty first guesses being correct in the former, and but seven out of twenty in the latter.

In another series of experiments, a "young mesmerist" afforded some very remarkable results, which, but for the circumstances under which they were observed, might be received with some degree of incredulity. The transference of *pain* impressions was noticed in the following way: A sofa cushion was held by one of the committee before the face of S., the "young mesmerist," who was in addition blindfolded, and thus doubly prevented from seeing the person (B.) whose sensations he was to repeat. Another committee-man then pinched or otherwise hurt B., who sat opposite S., holding his outstretched hand. S. in each case localized the pain in his own person after it had been kept up pretty severely on B. for a time varying from one to two minutes. The results are thus rendered:

Part of B. made painful:	Answer of S. (by pointing.)
Left upper arm.	Left upper arm.
Lobe of right ear.	Lobe of right ear.
Hair on top of head.	Hair on top of head.
Left knee.	Left knee.

The committee next drew a series of geometrical diagrams, which were then placed in view of B., but in such a way that S. could not possibly perceive them by sight. In each case S. described them correctly, but with the difference that he reversed them in position—*i. e.*, by describing the apex of a triangle, for instance, as below when it was drawn upright, etc. Further, after B. had attentively looked at drawings of the most fanciful description made by the committee, holding the while S.'s hand (the latter being blindfolded), S. reproduced the drawings in such wise that a close resemblance to the original was apparent, allowing for the blinded condition of his eyes; but in no case was there the smallest possibility that S. could have seen the figure, nor did B. touch S. while the figure was being drawn.

They do not pretend, as yet, to account for these phenomena, but merely relate and vouch for them.

Later on they may (or may *not*) have some satisfactory explanation.

This is truly an interesting field for research, and we trust that the labors of these distinguished gentlemen will be crowned with substantial success.

LAPAROTOMY FOR RUPTURE OF THE SMALL INTESTINE.

At a recent séance of the Soc. de Chirurgie, M. Bouilly reported a very interesting case.

A young man was kicked twice in the abdominal region by a vicious horse. The accident was followed by immediate collapse; later on by excruciating pain, with signs of commencing peritonitis the same evening. The next day the extremities were cold, there was profuse vomiting of greenish matters, extreme prostration, and retracted abdomen. The diagnosis was peritonitis by perforation, and immediate surgical intervention was decided on.

M. Bouilly performed the operation, and found

a small eschar at one point of the small intestine; and about five centimetres from the eschar, a perforation as large as a dime piece.

Eight centimetres of the intestine was excised and sutured after Lembert's method, one end of the intestine being introduced within the other. The operation was followed by a notable remission in the symptoms of peritonitis. On the fourth day the suture came away and a small artificial anus was established, but the general condition of the patient was good. On the tenth day, M. Bouilly made a slight exploration with the finger; the same evening there was a pronounced chill, and the patient died within twenty-four hours.

At the autopsy were found the lesions of purulent peritonitis from intestinal perforation; the sutures had all given way, but the two ends of the intestine were united by recent false membranes which had been ruptured by the exploration on the tenth day.

Before performing an operation of such gravity, the surgeon should be thoroughly convinced: 1st. That the intestine is really ruptured; and, 2d. That unless the operation is performed, there is danger of a fatal termination. The diagnosis of perforation is difficult; the meteorism insisted on by Jobert is not always a sure sign, and is often wanting.

M. Bouilly is the first to perform laparotomy in order to suture the perforated intestine. Larrey placed sutures on the intestine through an abdominal wound, and his patient recovered. M. Verneuil was of opinion that operations of total enterorraphy were rarely successful; it would be much better first to establish an artificial anus, which could receive ulterior treatment.

AUTO-INOCULATION.

At the recent Congress of the French Association for the Advancement of Science, at Rouen, M. Verneuil read a remarkable discourse on the above subject.

After defining inoculation, the orator demonstrated how it might be prophylactic, as in vaccination, accidental, as in syphilis, and inevitable, as it is sometimes after an operation. In certain obscure cases, the source of infection remains obscure. M. Verneuil distinguishes three forms of inoculation:

1. Ordinary inoculation, from one living being to another, as in syphilis.

2. Mesologic or mediate inoculation, as in erysipelas, when the virus originates from a living being, but becomes separated and floats in the air about him.

3. Auto-inoculation.

Here the virus exists already in the organism, but passes unperceived until the vital conditions of the system are lowered, when inoculation takes place. M. Verneuil considered only those forms of inoculation resulting from a traumatic lesion. He admits the parasitic nature of infectious and inoculable diseases. He classes these diseases in, first, maladies which affect the entire system (septicæmia, erysipelas); second, maladies at first local, but susceptible of generalization, as tuberculosis; finally, diseases which are always local (soft chancre).

The conclusion M. Verneuil arrives at from his study of the virus, the condition of the organism, and the traumatic lesion, is that very great circumspection should be exercised before operating in any virulent local malady, for surgical interference may produce aggravation of the local lesion and general infection.

BROMIDE OF POTASH IN DIABETES.

At a recent meeting of the Academie, M. Dujardin-Beaumetz read a report on a memoir presented by M. Felizet on the above subject.

Bromide of potash is essentially an adjuvant in the treatment of diabetes; it has its advantages and disadvantages. In cases of medium intensity, and sometimes in grave cases, in conjunction with dietetic means and the alkaline treatment, it may cause the sugar to disappear from the urine, but at the expense of a loss of strength on the part of the patient.

The general impression of the members of the Academie appeared to be that this medicament might be used when the sugar did not disappear under the use of proper dietetic means, but that

its action was too depressing to render it of much value in the treatment of diabetes.

Notes and Comments.

Mineral Water Inhalations.

In the *Lancet*, June 2, 1883, Dr. G. W. Black describes the method practiced in some of the foreign Spas, and especially at Mont Dore, in France:

The objections urged by people maintaining the present methods with plain water, are that the mineral waters would be spoiled by boiling, and no medicinal ingredients would be distilled off in the vapor. But this is now obviated by the *vaporization* being effected by the spray machine, along with air, or steam, as the motive power of the blast, and the temperature of the effective vapor need not necessarily be at an uncomfortable height for sustaining its maintenance and respirability along with common air.

It has been alleged by some investigators of the action of inhalation of medicated vapors (not including gases) that but infinitesimal quantities have been found to be really absorbed into the lungs or blood by the mechanical processes they adopted. Attention, however, may be drawn to the difference existing between inhalation by an instrument, as an ether inhaler fitted to the mouth, whereby the lungs only are influenced, and the general inhalation practiced in a large chamber full of vapor. In this case, the whole superficies of the skin are brought into the sphere of operation of the vapor, as well as the lungs, just as takes place in the natural experiment in sea air or city fog, the effects of which no one can hesitate to accept as being very appreciable. As to the mode of action of the skin, then, it may as yet be a matter for conjecture, whether it be an absorbing agent or an emunctorial one; and whether it assists the lungs or the lungs assist it in absorption of vapors, will remain to be determined by experimental investigation.

Pathology of Inebriety.

Dr. E. C. Mann, of New York, read a paper on this subject before the New Jersey State Medical Society (*Med. News*, June 23, 1883), in which he urged the importance of its early recognition and repression in its incipient stages. Inebriety is a disease where we have a most varied grouping of abnormal phenomena, traceable to altered action in the nervous system, and having for a starting-point some perverted functioning of one or more nerve-centres. It is a disease in which the victims are more or less irresponsible, as are the insane. It has a curable, prodromic stage, a stage marked by various neurasthenic symptoms, which should be regarded as the danger-signal of active dipsomania not far off, although the irresistible craving for alcohol which constitutes the morbid condition of inebriety may not yet have been actively displayed. Electricity, as central galvanization and cerebral electrization, cod-liver oil with phosphates, etc., are indicated. Among the predisposing causes are heredity, the exigencies of American life, syphilis, the inheritance of a neurasthenic constitution. The fully developed disease exhibits great nervous irritability and restlessness, and there exists a departure from the healthy structure of the nervous apparatus, and it is this abnormal condition of the central nervous system demanding stimulants that constitutes the disease.

The Malarial Miasm.

The *London Med. Record*, August 15, 1883, says:

As is well known, malarial fevers are but rarely developed from exposure by day to the air of malarial places, but rather arise from the influence of the night air, especially of those clear nights in which heavy dew is condensed. If the miasm exist, it must be found in the soil and in the dew. Professor Silvestrini (*Gazz. Med. Ital. Venete*, February 10, 1883), collected the dew and soil from notoriously unhealthy places; he first injected the dew hypodermically in two dogs, with no result. He then tried them with an infusion of the soil, filtered and unfiltered, also with no result. As dogs and other animals are not known to suffer from malarial fevers, he determined to experiment on man. He injected the dew under his own skin, having first ascertained that it contained various forms of bacilli, some sporiferous, some in threes or in fours; no result. He tried the same on his wife with like result. He and his friends made fifty-two experiments on man with the dew and the infusion of the soil, proving that their subcutaneous injection is innocuous. The soil and dew were collected from many places, and used sometimes at once, sometimes after some time. These results support the earlier researches of Professor Silvestrini. He denies that a primitive infection is the cause of malarial fevers.

Poisoning by Laburnum.

In the *British Medical Journal*, September 1, 1883, Dr. C. A. Lane says:

"Lately, no fewer than eight different cases

of poisoning by laburnum pods and berries have come before me. The children all presented a pallid and exhausted appearance. Some of them complained of extreme griping pains in the abdomen, nausea, and vomiting occasionally, the vomited matter consisting of the contents of the stomach, with pieces of the pods and berries scattered in it. The pulse was slow and somewhat feeble, and, in two of the cases, scarcely perceptible. One little boy, who had partaken of some of the pods and berries, and whom I watched very carefully, got into a very drowsy condition, and was with difficulty kept awake; occasionally twitching of the muscles of the upper extremity was noticed. Only in one case was there diarrhœa present along with the vomiting. The pupils were either natural or slightly contracted. The symptoms came on from half an hour to an hour after receiving the poison. In some of the cases I administered emetic doses of ipecacuanha wine, and in others five to six grains of sulphate of zinc. I found that the sulphate of zinc relieved the sufferings quicker, and had not the depressing effect of ipecacuanha."

Two Cases of Tobacco Amblyopia.

After reporting two cases in the *Lancet*, July 14, 1883, Dr. Thomas Buzzard makes the following remarks:

"These cases, and especially the second one, are calculated to support the view, that changes in the appearance of the optic disc, closely resembling those dependent upon the atrophy so often associated with tabes dorsalis (locomotor ataxy), may have their origin in the excessive use of tobacco, excess being possibly measurable by the idiosyncrasy of the patient, rather than by the actual quantity consumed. In both instances, but most markedly in the first, the sudden pains which were described inclined us towards a diagnosis of sclerosal atrophy, and it was chiefly the continued presence of the patellar-tendon reflex which prevented the too confident expression of an unfavorable prognosis. In a case of optic nerve atrophy already published, no symptom of tabes has been associated with the intra-ocular change except that the knee phenomenon disappeared in succession from each leg while the patient was under observation. He is now irreparably blind."

The Staining of Tubercle Bacilli.

The *London Medical Record*, August 15, 1883, says that Dr. Peters, of Bad Elster (*Berliner Klin. Wochensch.*, June 11), submits the following mode of double staining of the bacilli without the use of nitric acid, and in much shorter time than is required by Ehrlich's method: A fine section is taken out of alcohol and placed for about a minute in distilled water, then for thirty minutes in a filtered aqueous solution of gentian-violet, prepared with fresh anilin water; then for eighteen hours in absolute alcohol (in a dish or saucer not holding less than twenty-five grammes), and renewed once or twice in this time. After this, it is placed for three minutes in a three per cent. filtered solution of aniline yellow; and then for thirty minutes in absolute alcohol. By a first short washing the bacilli are seen grouped together; by prolonged washing, their structure is rendered distinct. By this plan of treatment the magnified bacilli will be seen of a violet color, on a yellow ground. Other bacteria may also be colored by the same process.

On the Feeding of Infants Deprived of Breast Milk.

Dr. George Crichton thus epitomizes an article on this subject in the *Brit. Med. Jour.*, June 2, 1883:

In the morning, put half a pint of new milk into a convenient vessel, *e. g.*, a thin china breakfast cup, and place it in a cool place. In the evening, skim it, preserving the cream, and into the skimmed milk put a piece of rennet an inch square, and stand the cup in a saucepan of hot water in a warm place. In from five to fifteen minutes the milk curdles. Break up the curd with a spoon, remove the rennet (which will serve again), and pour off the whey. Boil the whey for a second, when a further curdling takes place: then strain the whey. To the quantity mentioned, add one-quarter of an ounce of sugar of milk, the cream removed at the first, and one pint of new milk. The process is complete. It is generally sufficient to make it once a day, though probably in larger quantity than we have taken for illustration. The process requires care; but, after a few trials, it is really very simple and easy. Of course, everything must be kept perfectly clean.

The Treatment of Leprosy.

Dr. Henry G. Piffard contributes an addition to the literature of leprosy in the *Jour. of Cut. and Ven. Dis.* for July, 1883, which concludes as follows:

"As regards this branch of the subject, it may be briefly stated that, as yet, no specific for the disease has been discovered. It is also problematical whether the affection is susceptible of abso-

lute cure. Per contra, we are fully justified in stating that rapid amelioration may often follow judicious treatment, even in the advanced stages of the disease, as we have more than once witnessed. We have recently (*Materia Medica and Therapeutics of the Skin*, pp. 200–208) considered this subject at length, and can at present state that the drugs that have appeared to exert the most decided influence on the affection are nux vomica and its derivatives, and chaulmoogra oil. With these, the progress of the disease can be stayed, at least for a time, and the unhappy sufferers restored to a condition of comparative comfort. More than this we do not feel warranted in promising."

Head Injuries.

With reference to the use of the trephine in injuries to the head, Dr. S. E. Munford thus forcibly writes in the *American Practitioner* for June, 1883:

"Timely operative treatment in injuries of the head is doubtless often withheld because of an existing prejudice against such measures. The danger growing out of the use of the trephine as a surgical procedure is, in my belief, much overrated. Opening the skull with a conical trephine in an ordinarily deft hand is in itself attended with little danger, and is an operation that should intimidate neither patient nor surgeon. Let timorous ones read the following from John Bell's Principles of Surgery: 'I, the underwritten, Philip, Count of Nassau, hereby declare and testify that Mr. Henry Chadbourne did trepan me in the skull twenty-seven times, and after that did cure me well and soundly.'"

Infantile Menstruation.

In the *American Journal of Obstetrics* for September, 1883, Dr. A. Van Derveer, of Albany, N. Y., reports the case of a girl aged two years and seven months who commenced to have a regular menstrual flow when she was four months old. Her mammary glands are as large as small oranges; mons veneris well developed and covered with hair; external labia large, and vulva fully formed. She is bright and intelligent, but irritable at commencement of menstrual epoch. Her physical condition is excellent. She is quite modest, and does not evince any erotic tendencies.

Cold Phenicated Bath in Surgical Inflammatory Lesions.

The first of seven cases reported by Dr. P. D. Ribus (*La Independenzia Med.*) was one of diffused inflammation of the forearm and hand, with high fever, intense pain, and diarrhœa. In spite of free lancing, poultices, and sedatives, the condition did not improve. Dr. Ribus then ordered cold baths (2½ per cent. of carbolic acid) of twenty minutes' duration every three hours, the hand and arm being covered with compresses of the same solution. The patient did remarkably well, and experienced almost at once great relief. The antiseptic and astringent effects of the baths are of indisputable utility in practice, as well as theoretically indicated.

Cholera Infantum.

M. Jules Simon recommends the following potion in cases where there is considerable abdominal pain with adynamia:

℞.	Bismuth subnitr.,	℥ j.
	Vini (malaga),	ʒ ss.
	Syr. quinquiniæ (fr. Cod.),	ʒ j.
	Aquæ,	℥ iiiss.
	Tr. opii (at two years),	gtt. ij.

M. A teaspoonful may be given every hour, or every second hour until the pain disappears.

As drinks during this period, rice-water, albuminous water, and Sydenham's white decoction, may be given.

As aliments, bouillon and milk.

Eczema of the Head in Children.

The following prescription has been highly recommended by M. Lassar in the form of eczema capitis observed in very young children:

℞.	Acid. salicylic,	ʒ ss.
	Tr. benzoin,	℥ j.
	Ung. petrolei,	℥ iij. M.

The child's head should first be thoroughly washed with Castile soap, and then carefully anointed three times daily with the ointment.

If the crusts are hard and difficult to remove, they may be softened with olive oil containing two per cent. of salicylic acid.

Bœckel's Dressing.

This is a very cheap dressing, which may, in many cases, advantageously replace Lister's dressings.

Several large pieces of fine crinoline stuff, folded in four or eight doubles, are allowed to remain for four days in the strong carbolic acid solution (1 in 20).

When required for use, they may be plunged for ten minutes in tepid water to remove the excess of carbolic acid.

It forms an aseptic and slightly antiseptic dressing.

Railroad Accidents to Hands and Feet.

In the *Fort Wayne Journal of Medical Science*, July, 1883, Dr. Frederick Cole, of El Paso, Ill., publishes a practical article on this subject. He relates several cases, and says that in all cases of conservative surgery, he relies upon two important means, viz., *antiseptic dressings and drainage*, and by drainage he means the removal of necrosed bones at an early hour, as well as the evacuation of pus.

Paralysis of the Oculo-motor Nerve During Menstruation.

Prof. Hassner reports in the *Wien. Med. Blat.*, March 15, what he considers to be a unique case. The patient, a girl aged 17, was perfectly well until the first beginning of menstruation, when paralysis of the left eyelid appeared on the first day, and lasted, gradually improving, until the third day, when it disappeared with the cessation of the menses. This occurred at every menstrual period.

Nervous Constipation.

For this condition, which we suppose refers to constipation in nervous, hysterical women, the *Rivista di Bologna* advises from one to four of the following pills daily. If intestinal atony exists, extract of nux vomica should be substituted for the belladonna:

℞. Pulv. ferri sulphatis . . . . . gr. 1½
Aloës socotrinæ . . . . . gr. ¾
Ext. belladonnæ . . . . . gr. 1/3–1/6.

Cotoin for Cholera.

From the *Med. Press*, August 15, 1883, we learn that cotoin is recommended in Egypt. For internal administration the use of an emulsion containing fifteen grains of cotoin in about four ounces is recommended, a tablespoonful to be taken every quarter or half an hour; or cotoin may be given as a powder in doses of one-third of a grain every half hour or hour.

A Powerful Antiseptic Wash.

It may be made by mixing sixty-seven per cent. of carbolic acid with thirty-three per cent. of resorcin and adding ten per cent. of water, which may be diluted to suit.

Oxydendron in Anasarca.

This drug, which grows extensively throughout the Southern States, is highly recommended in dropsical effusions by Dr. Clendenin (*Therapeutic Gazette*, April, 1883). He makes two-grain pills from a semi-solid extract, and gives two or three of them three times daily, gradually increasing, until twelve or fifteen are taken daily, and then gradually decreasing.

Belladonna in Malignant Malarial Diseases.

Dr. J. W. Kennedy, of Louisville, Texas, tells us, in the *Southern Practitioner* for September, 1883, that he has derived good results from the use of belladonna or atropia in the congestive stage of many of the malignant or pernicious cases of malarial disease, such as they have in the South. He prefers to use atropia hypodermically.

CORRESPONDENCE.

Treatment of Ophthalmia Neonatorum.

EDS. MED. AND SURG. REPORTER:—

The purulent stage of this disease shows itself in two or three days after birth, and is gonorrhœal ophthalmia of the new-born infant. It is caused by contagion, and never occurs unless the mother, at the time of delivery, suffered with a gonorrhœal discharge from her vagina. The inflammation is as active and rapid as that of gonorrhœal ophthalmia of the adult; but is more manageable, and is not so rapidly destructive of the textures of the eyes. The physician who has seen and treated many cases of this disease, soon learns that the treatment must be alterative internally, and soothing and slightly astringent externally; and that the routine recommendation of text-books of the application of solutions of such medicines as nitrate of silver, chloride of zinc, corrosive sublimate, and alum, to the inflamed eyes, not only do no good, but are absolutely injurious. When the young physician meets with his first case of this disease, and consults his text-books on the subject of its treatment, he finds the local applications recommended for it are presented in such a confused and uncertain manner, that he does not know whether it will be best to use one in preference to the other; or all, as recommended, one succeeding the other, and not having experience to guide him, his case is more apt to terminate with an injured cornea and defective vision, than with an uninjured eye. I usually prescribe:

℞. Potass. iodid., grs. xij.
Aqua distil., ℥ iss.
Syrup simplex, ʒ ss.

M. S.—Shake well, and give a teaspoonful every two hours to the babe.

As a wash for the eyes, I have found nothing better than:

℞. Zinc. sulphas,
Plumb. acet., āā grs. vj.
Aqua distil, ℥ iv.
Tinct. opii, gtts. iv.

M. S.—Shake well, and after the mixture has settled, use the clear liquid.

This should be dropped into the eyes every

half-hour, or every hour or two, or whenever the babe arouses, and all matter should be well washed from the eyes and eyelids by it, and a bit of linen cloth wetted with the wash should be kept constantly applied to each eye.

I have the edges of the eyelids well anointed three or four times a day with:

℞. Red oxide of mercury, grs. ij.
Vaseline, ℥j.

Mix; but before making an ointment, the mercury should be well pulverized.

I have learned by actual experience to recognize the internal administration of iodide of potassium to be invaluable in this disease, and under this plan of treatment the many cases of ophthalmia neonatorum that have fallen to my care, have uniformly terminated without either injury to the structure of the eyes, or impairment of the sense of sight.

J. B. Johnson, M. D.

Washington City, D. C.

A Card from Dr. Hamilton.

Eds. Med. and Surg. Reporter:—

In a pamphlet recently issued by me in answer to a critique by Dr. A. L. Carroll of my lecture, in March last, in regard to sewer-gas and contaminated water as the chief causative agents of typhoid fever, diphtheria, and scarlet fever, I have, to my sincere regret, committed an error. The critique is contained in the *N. Y. Med. Record* of June 9. In the second column, twentieth line from top, the words *this* country occur, whilst in my brochure (page 8, fourth line from top) the word *the* occurs, giving an entirely opposite meaning to that intended. Of this error, the result, doubtless, of the habit of rapid reading and writing, I was not aware until my attention was called to it by a note in the last issue of the *Med. Record*. As a considerable number of the pamphlets were distributed in this city, I desire that this correction may have the benefit of your widely-circulated Reporter in the next number. I must here state that the absence of Dr. Carroll in Europe rendered the correction of this, to me, unpleasant error, impossible. If any other material misconception of the purport of the critique on my part has occurred, I have not been able to discover it.

Geo. Hamilton, M. D.

Philadelphia, Sept. 25, 1883.

Tomato Idiosyncrasy.

Eds. Med. and Surg. Reporter:—

An article entitled "An Idiosyncrasy," appeared in the Reporter of September 1. Dr. P. B. Reese cites a case of a lady, where the use of tomatoes causes painful and frequent micturition, and wishes to hear of similar cases.

I have observed the same effect in several patients, men as well as women. On testing the urine with heat I get a white precipitate which disappears with the addition of a few drops of nitric acid.

As to the character of the sediment, I am not enough of a chemist to be certain, but take it to be oxalate of lime.

In one case I had the urine examined with the microscope, and the microscopist reported dumb-bell crystals of oxalate of lime.

As to the cause: the tomato is classed along with rhubarb and sorrel, as an article of diet which produces oxalic deposits in the urine. The amount of this in the urine causes irritation of the bladder with accompanying symptoms.

C. C. Hill, M. D.

Levering, O.

Wanted, a Reliable Tænifuge.

Eds. Med. and Surg. Reporter:—

After very indifferent success with nearly the entire list of tape-worm remedies, including turpentine, male fern, pumpkin seed, kousso, kamala, pomegranate bark, etc., the writer requests information of such of the readers of the Medical and Surgical Reporter as have found a *reliable* tæniacide, to dispense their light through its pages for the writer's benefit.

My last venture was with "Tauret's Pelletierine," but succeeded only in expelling large quantities of fragments, but no head.

G. W. Johnson, M. D.

Savannah, Ills., September 14, 1883.

News and Miscellany.

Medical Society of Virginia.

At the recent meeting, held at Rockbridge Alum Springs, September 4, 5, 6, 7, the following papers were read: "Mineral Waters," by Dr. J. E. Chancellor, of the University of Virginia; "Individual Rights of Physicians, and the Limited Protection Afforded Them by Our State Laws, with Suggestions as to Some Action of Redress," by Dr. Wm. D. Cooper; "Report on Advances in Anatomy and Physiology," by Dr. John R. Wheat, of Richmond, Va.; "Report on Advances in Chemistry, Pharmacy, Materia Medica, and Therapeutics," by Dr. A. M. Fauntleroy, of Staunton, Va.; "Report on Advances in Obstetrics and Diseases of Women and Children," by Dr. M. G. Ellzey, of Washington, D. C.; "Advances in Diseases of Children," by Dr. Wm. H. Coggeshall, of Richmond, Va. Dr. Thomas H. Howard, of Floyd C. H., exhibited a vial containing eleven hundred fragments of bones which he had removed from the ear of a woman aged forty-six years. He thought it probable that they were the result of a fracture of the external plate of the skull, but the sentiment of the Society was that it was a case of deception by a hysterical patient. "Therapeutic Value of the Rawley Springs, Va.," by Dr. M. G. Ellzey, of Washington, D. C.; "How to Remove Foreign Bodies from the Ear," by Dr. Julian J. Chisolm, of Baltimore; "Suspensory Extension Splints," by Dr. J. St. Pierre Gibson; "Plastic Surgery of the Face," by Dr. L. McLane Tiffany; "Deflection of the Nasal Septum and Its Treatment," by Dr. John N. Mackenzie. Dr. Joseph A. White, Richmond, Va., exhibited some instruments for use in deflected nasal septum; also a specimen of a foreign body removed from a patient's nose. "Report on Practice," by Dr. Samuel K. Jackson, of Norfolk, Va.; "The Present Aspect of the Bacillus Tuberculosis Question,"

by Dr. Wm. C. Dabney, of Charlottesville, Va.; "Report on the Advances in Ophthalmology, Otology, and Laryngology," by Dr. Charles M. Shields, of Richmond; "Injuries to the Eye," by Dr. J. A. White, of Richmond; "Urethral Stricture, Treated by Internal Urethrotomy," by Dr. George Ben Johnston, of Richmond; "Epidemic of Diphtheria in Pittsylvania County," by Dr. Rawley Martin, of Chatham; "Reiter's Theory of Diphtheria," by Dr. Wm. H. Coggeshall, of Richmond; "Thirty Years' Personal Experience in Diphtheria," by Dr. Bedford Brown, of Alexandria; "The Therapeutic Value of Rockbridge Alum Water," by Dr. A. M. Fauntleroy, of Staunton; "Tracheotomy in Diphtheria," by Dr. L. McLane Tiffany, of Baltimore; "Cholera Infantum," by Dr. S. K. Jackson, of Norfolk.

The officers elected for the ensuing year were: *President*—Dr. J. Edgar Chancellor, of Charlottesville; *First Vice President*—Dr. S. B. Morrison, of Rockbridge; *Second Vice President*—Dr. J. A. Graybill, of Amsterdam; *Third Vice President*—Dr. Bedford Brown, of Alexandria; *Fourth Vice President*—Dr. S. K. Jackson, of Norfolk; *Fifth Vice President*—Dr. J. M. Estill, of Tazewell C. H.; *Sixth Vice President*—Dr. T. J. Pretlow, of Jerusalem; *Recording Secretary*—Dr. R. B. Cabell, Jr., of Richmond; *Corresponding Secretary*—Dr. Hugh Taylor, of Richmond; *Treasurer*—Dr. R. T. Styll, of Richmond; *Executive Committee*—Dr. W. W. Parker, of Richmond, chairman; Drs. Black, Cunningham, Claibourne, and Gleaves: all other committees holding over.

Canada Medical Association.

At the meeting held at Kingston, Ontario, September 5th, 6th, 7th, 1883, the following papers were read: "Report from Committee on Climatology and Public Health," by Dr. Larocque, of Montreal; "Diet as a Therapeutic Agent," Dr. Playter, of Toronto; "Invaginated and Gangrenous Bowel," by Dr. Sheard, of Toronto; "Inflation of the Lungs by Abdominal and Thoracic Traction," by Dr. Botsford, of St. John's, N. B; "Successive Dropsies of the Amnion, always Specific," by Dr. Dorland, of Milwaukee, Wis.; "Relation of Medical Men to Each Other, and to Each Other's Patients," by Dr. Dupius, of Kingston; "Hyoscyamine in the Treatment of Mental Diseases," by Dr. Metcalf; "Leprosy in New Brunswick," by Dr. Graham, of Toronto; "Imperforate Anus with Fæcal Fistula," by Dr. Fenwick, of Montreal; "Retroversion and Retroflexion of the Uterus," by Dr. Worthington, of Clinton; "Femoral Hernia," by Dr. Campbell, of Seaforth, Ont.; "Paracentesis Pericardii," by Dr. McDonald, of Londonderry; "Experiments on Resection of the Bowel," by Dr. James Bell, Montreal; "Report of the Committee on Necrology," by Dr. Fulton, of Toronto; "Report on Education," by Dr. Thorburn, of Toronto; "Pigmentary Degeneration of the Retina," by Dr. Tobin, of Halifax, N. S.; "General Hydrarthrosis of the Smaller Joints," by Dr. Fife Fowler, of Kingston; "Some Points in Chronic Bright's Disease," by Dr. Osler, of Montreal. Dr. Holmes, of Chatham, read a paper on "Erosions of the Female Urethra;" Dr Hingston, of Montreal, showed to the Section a note-book, which he had prepared for ovarian and abdominal tumors, and which he thought might be of some service; Dr. Major, of Montreal, described the various tumors met with in the naso-pharynx, and the modes of removal; Dr. Oldright read the notes of a case of "Fibromyxoma of the Thigh," and exhibited the specimen; Dr. Poundfoot, of Montreal, read an article on "Color-blindness," and exhibited Thomson's instrument.

OFFICERS FOR ENSUING YEAR.

President—Dr. Sullivan, of Kingston, Ont.; *Vice-Presidents—Ontario*, Dr. Thorburn, of Toronto; *Quebec*, Dr. Robillard, of Montreal; *New Brunswick*, Dr. Christie, of St. John; *Nova Scotia*, Dr. McDonald, of Londonderry; *Manitoba*, Dr. Lynch, of Winnipeg; *General Secretary*—Dr. Osler, of Montreal; *Treasurer*—Dr. Sheard, of Toronto.

Next place of meeting, Montreal.

American Dermatological Association.

This Association held its annual session at Lake George, August 29, 30, and 31. The following papers were read: "The Treatment of Acne," by Dr. Piffard, of New York; "General Exfoliative Dermatitis," by Dr. Graham, of Toronto; "Impetigo Contagiosa," by Dr. Stelwagon, of Philadelphia; "A Case of Multiple Cachectic Ulceration," by Dr. Atkinson, of Baltimore; "Experiments in the Use of Naphtol," by Dr. Van Harlingen; "A Trip to Tracadie," by Dr. Fox; "Paget's Disease, or Malignant Papillary Dermatitis," by Dr. Sherwell; "The Pathogenesis of Drug Eruptions," by Dr. Morrow, of New York; "Polymorphous Changes observed in the Tubercular Syphilide," by Dr. Taylor, of New York; "Pseudo-psoriasis of the Palm," by Dr. Sherwell, of Brooklyn; "Psoriasis of the Palm," by Dr. Alexander, of New York; "A Study of the Coincidence of Syphilitic and Non-Syphilitic Affections of the Skin," by Dr. Hyde, of Chicago; "Peculiar Appearance of the Initial Lesion of Syphilis," by Dr. R. W. Taylor, of New York; "The Value of a Solution of Sulphide of Zinc in Lupus Erythematosus," by Dr. Duhring, of Philadelphia; "A Case of Ainhum, with Microscopic Examination," by Dr. Van Harlingen, of Philadelphia; "A Papular Disease of the Skin," by Dr. Hardaway, of St. Louis; "Peculiar New Growth of the Skin of the Arm," by Dr. Graham, of Toronto.

OFFICERS FOR THE ENSUING YEAR:

President—Dr. Robert W. Taylor, of New York.
Vice Presidents—Dr. A. Van Harlingen, of Philadelphia, and Dr. J. E. Graham, of Toronto.
Secretary—Dr. W. Alexander, of New York.
Treasurer—Dr. George H. Rohé, of Baltimore.

The Association next meets at West Point, on the Wednesday nearest September 1, 1884.

American Gynecological Society.

At the recent meeting, held in Philadelphia, September 18th, 19th, 20th, the following papers were read; "Superinvolution of the Uterus," by Dr. Joseph Taber Johnson, of Washington, D. C.; "Importance of Cleanliness in Surgical Operations," by Dr. R. S. Sutton, of Pittsburgh; "Hot Water in Secondary Hemorrhage after Pelvic Operations," by Dr. Albert H. Smith, of Philadelphia; "Some Points Connected with the Subject

of Dysmenorrhœa," by Dr. C. D. Palmer, of Cincinnati; "A Biographical Sketch of Dr. Nathan Smith, Founder of Dartmouth Medical College," by Dr. Gilman Kimball, of Lowell, Mass.; "A Rare Form of Abdominal Tumor," by Dr. Thaddeus A. Reamy, of Cincinnati; "Congenital Fissure of the Female Urethra, with Exstrophy of the Bladder," by Dr. Henry F. Campbell, of Georgia; "A Study of the Etiology of Perineal Laceration, with a New Method for its Proper Repair," by Dr. Thomas Addis Emmet, of New York; "The Management of Accidental Puncture and other Injuries of the Gravid Uterus as a Complication of Laparotomy," by Dr. Charles Carroll Lee, of New York; "Is Extirpation of the Cancerous Uterus a Justifiable Operation?" by Dr. A. Reeves Jackson, of Chicago.

OFFICERS FOR THE ENSUING YEAR:

President—Albert H. Smith, M. D. of Philadelphia; *Vice-Presidents*—James R. Chadwick, M. D., of Boston; S. C. Busey, M. D., of Washington; *Secretary*—Frank P. Foster, M. D., of New York; *Treasurer*—M. D. Mann, M. D., of Buffalo; *Other Members of the Council*—Drs. T. Gaillard Thomas, of New York; Fordyce Barker, of New York; T. A. Reamy, of Cincinnati; R. S. Sutton, of Pittsburgh.

It was decided to hold the next meeting at Chicago, on the last Tuesday in September, 1884.

A Peculiar Case.

The *Med. Record*, June 23, 1883, tells us that Professor Porro recently performed an operation for no other purpose than to determine the sex. The individual requiring such unique interference was pseudo-hermaphrodite, aged twenty-two, had been brought up as a female, although all her (his) tasks had been masculine. The face and chest were like those of a man, although the breasts were considerably developed. The pelvis and lower limbs were like those of a woman. The mons veneris was slightly developed. There was a vulva, with a well-developed clitoris, labia and a short vagina; no penis, no prostate, and no uterus. At the summit of what corresponded with the labia majora, near the inguinal region, two round bodies could be felt, which on pressure gave pain. The question was, were they ovaries or testicles. Professor Porro cut down on the right side, and found that the body was a testicle with epididymis and spermatic cord attached. The wound was closed up, the patient pronounced a man, and sent forth enchanted with his new status in society.

M. Pasteur on Wine.

From the *Brit. Med. Jour.*, June 30, 1883, we take the following:

The remarkable researches of Pasteur upon alcoholic ferments have a great influence upon the improvement of brewing of beer, and they promise, it would seem, to have no less valuable result in the making of wine. The *Pharmaceutical Journal* mentions, that it "seems quite probable that the quality of the wine of any year is as much affected by the particular mould which predominates during the fermentation, as by the amount of sunshine or rain during the growth of the grapes, or even the passage of a comet through the sky. In Germany, it is already the practice to sterilize the must and then to sow it with some selected ferment, a process favorable to the elimination of various 'false' ferments (species of *Dematiei*) that are common to the surface of the grape and other fruit, whilst the custom in some southern countries of decanting the must as soon as the first foaming appears may have the same effect. In a recent communication (*Comptes Rendus*, tome xcvi., p. 1369), M. Le Bel incidentally remarks, that last year none of the grape-collection with which he had to do underwent fermentation influenced by what Pasteur considers to be the true wine ferment, *Saccharomyces ellipsoides*, Rees, but was well fermented by *S. pastorianus*. M. Le Bel also states that a natural must yields a larger proportion of the higher alcohols than a solution of sugar fermented with the same ferment. This observation has an important bearing upon the keeping of the 'wines' now largely manufactured from sugar solution in which grape-skins have been steeped."

Does the Retention of Dead Teeth in the Jaws Exert an Unfavorable Influence on Health?

Dr. Frank Abbott thus concludes a communication on this subject to the *Med. Record*, July 14, 1883:

"The conclusion then is, that *no* pulpless tooth is absolutely sure to not make trouble. From the most perfect operation of removing the dead pulp and filling the canals (which, by the way, should never be done with gold) to those where the entire dead pulp is allowed to remain in the teeth, there is more or less of a periosteal irritation, which is almost constant. It is true that the tooth, or teeth, may not be painful, but some remote part, such as the eye, or the ear, may be effected, or a neuralgia extending over the side of the face and head may be the result. Many cases like these have come under my observation, where the most perfect dental work had been done. In many cases, however, pulpless teeth, after treatment, are kept in the mouth for many years, and render good service without apparently producing any pain or distress whatever. Others will, upon the slightest provocation, become sore and very painful. This, however, in most cases can be sufficiently overcome by proper treatment, to warrant their retention, provided they are very useful. But when, after consultation, it is determined that the irritation produced by such teeth is more injurious to the patient than can be overcome by their service in mastication of food or otherwise, in my judgment they should be removed at once. I might cite many cases bearing directly upon this subject, but for the present the above will suffice."

Transferring Inflammable Liquids.

A new apparatus for transferring inflammable liquids has recently been devised in France. A tube fitted to a cork is bent back. It is filed at the bent part to receive a cover which is chained to the cork. A longer tube for the passage of atmospheric air is placed inside the tube. The large tube is immersed in the bottle or barrel, care being taken to shut the neck or bung of the

latter tightly by corking. The cover is then unscrewed, and the bent end of the tube is fitted to the receiving vessel. Mineral oils flow in a continuous stream, and there is no waste. The gas cannot escape, and the exterior air fills the void make by the liquid that has been drawn off, and thus the danger of explosion is avoided. Moreover, when the receiver is full, and the spout is immersed in the liquid, the flow ceases at once, as the air can no longer enter by the central tube, which is closed by the liquid.

A Disinfectant Laundry Blue.

Mix together 16 parts of prussian blue, 2 parts of carbolic acid, 1 part of borax, and 1 part of gum arabic, into a stiff dough. Roll it out into balls as large as hazel-nuts, and coat them with gelatine or gum to prevent the carbolic acid from escaping.

Medico-Chirurgical College of Philadelphia.

Dr. William T. Janney has been unanimously elected Professor of Practical Anatomy and Clinical Surgery in the Medico-Chirurgical College of Philadelphia. Dr. Janney is the present coroner of the city, and is well known to the profession as an anatomist and surgeon of extended experience.

Items.

—Dr. Louvain, of Carlsbad, has met with several cases in which difficulty of breathing was due to the administration of moderate doses of salicylic acid; the breathing was labored and rapid.

—An English farmer, aged fifty-nine, of previous good health, was stung in the eyelid by a bee. Signs of collapse appeared at once, and the man died in one-half hour after the sting was received.

—Dr. Squibb has substituted for the ordinary blue and red litmus paper, a single color, viz., purple. This purple litmus paper turns red with acids, blue with alkalies. It is claimed to be much more delicate and convenient.

—In the *Medical Record*, June 30, 1883, Dr. J. T. Stewart reports a case of "Impregnation of a completely prolapsed uterus—abortion—extirpation of uterus and ovaries with a large section of the posterior wall of the vagina—recovery."

—The Hot Springs correspondent of the *Army and Navy Journal* announces that the springs are "run by the devil,"—and that he "heals his own friends," so that those who come and receive no benefit can feel assured of their future welfare.

—Among the important changes in the tariff on drugs, which went into effect July 1, is a reduction on chloroform from one dollar to fifty cents per pound, and an increase on preparations of opium from six dollars to ten dollars per pound.

—A rich, miserly Jew in London went to a dentist to have an aching tooth extracted. He inquired how much it would cost. The dentist said sixpence (twelve cents), but if he would have two extracted he would charge him only ninepence. He had two extracted, one a perfectly sound tooth, thereby discounting toothache and saving threepence.

—A fatal case of poisoning by hydrochloric acid is reported from Wishaw, Scotland, where the wife of a platelayer drank some of the liquid in mistake for whisky, and, after lingering for a fortnight, succumbed to the effects of the irritant, death occurring somewhat suddenly.

—With a view to encourage the study of veterinary science, the Lieutenant-Governor of Bengal has resolved to offer two prizes, one of $250, and the other of $100, for competition by holders of agricultural scholarships from Bengal studying in the Royal Agricultural College, Cirencester.

—An exchange says: "If from babyhood to old age everybody, from this time forward, were to use the tooth-brush as they should, and adopt a proper regimen of phosphoric and bone-producing food, in a few generations there would be a return to a primitive condition of tooth substance, and suffering from tooth diseases nearly cease."

—Professor Hoffman, the eminent chemist of the Berlin University, unveiled a colossal monument at Munich recently to the memory of Liebig, Helmholtz, and Lepsius. A sum of more than 150,000 marks was collected, and this amount was large enough to enable the promoters not only to erect the monument at Munich, but to order a copy of it to be set up in front of the University of Giessen, where Baron von Liebig first attained eminence as a chemist.

—In his interesting "Retrospect of a Long Life," Mr. S. C. Hall states that Mr. Edmund Macnaghten, of Bushmills, County Antrim, Ireland, married his second wife when he was eighty-two years of age. By this marriage he became the father of two sons, the eldest of whom was a Lord of the Treasury from 1819 to 1830; the youngest was born when his father was eighty-four years of age. Mr. Macnaghten lived till 1781, and died at the age of 102 years. He is described as a fine, hale, handsome old man.

MARRIAGES.

STANTON—HILL.—September 5, 1883, by the Rev. E. Stubbs, No. 1236 South Fourth street, Philadelphia, Dr. Jas. G. Stanton, of Camden, N. J., and Miss Jennie Hill, of Milford, Del.

TALBOTT—OSBORNE.—At Grace Church, New York city, on Saturday, September 1, 1883, by the Rev. Edward O. Flagg, D. D., Dr. Thomas M. Talbott, of Washington, D. C., and Laura L. Osborne, of New York city.

TUTHILL—PEASE.—At the residence of the bride's parents, Poughkeepsie, N. Y., August 14, 1883, by the Rev. N. S. Tuthill, T. K. Tuthill, M. D., son of the officiating clergyman, and Miss Irene Pease.

WILLARD—BREWSTER.—At the residence of H. H. Beebe, No. 664 Carroll street, Brooklyn, N. Y., August 20, 1883, by the Rev. S. B. Halliday, Dr. S. Willard, of Jonesboro, Ill., and Miss Sarah Brewster, of Jacksonville, Fla.

DEATHS.

HOMER.—In this city, August 23, 1883, Horace Homer, M. D., in the forty-second year of his age.

TRASK.—At his residence, at Astoria, L. I., on Sunday, September 2, 1883, after a short illness, James Dowling Trask, M. D.

WRIGHT.—Charles Wright, M. D., of New York city, in London, England, September 2, 1883, aged fifty-one years and seven months.